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BEFORE THE UNITED STATES RAILROAD LABOR BOARD

EXHIBIT No. 2

FLUCTUATION IN NUMBER OF FIREMEN AND
ENGINEERS EMPLOYED

1914-1921

Presented by
W. S. CARTER,
President, Brotherhood of Locomotive
Firemen and Enginemen.

Chicago
1921

Q. 75
Paul F. Bussan
6-30-22

FLUCTUATIONS IN NUMBER OF ENGINEERS AND FIREMEN EMPLOYED ON FIFTEEN REPRESENTATIVE RAILROADS
1914 - 1921.

385,373
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The following tables of numbers of engineers and firemen employed at various dates from 1914 to 1921, on fifteen representative railroads in the United States indicate the irregularity of employment among these classes of employees.

During the season of increasing business, the railroads increase the number of engineers and firemen in order to get the increased business over the road. On the other hand, when business falls off, the number of these employees is decreased, meaning that the number represented by the decrease have either lost their jobs or been demoted.

The following instances taken from the tables of road freight firemen are illustrative of the extent or degree of this liability of unemployment. An illustration is given for each of the 15 roads and the period covered in each case is very short.

Railroad	Period Covered	Decrease in Number of Employees from	Amount of Decrease	
			Number	Per cent
B. & O.	3 months, from December, 1920, to March, 1921	2058 to 1468	590	28.7
D., L. & W.	One month, from March, 1920, to April, 1920	497 to 436	61	12.3
Erie	4 months, from November, 1920, to March, 1921	864 to 597	267	30.9
N. Y. C.	3 months, from December, 1920, to March, 1921	2012 to 912	1100	54.7
P. R. R.	3 months, from January, 1919, to April, 1919	3409 to 2252	1157	33.9
A. C. L.	3 months, from December, 1914, to February, 1915	358 to 273	85	23.8
L. & N.	3 months, from October, 1918, to January, 1919	1020 to 893	127	12.5
N. & W.	3 months, from December, 1920, to March, 1921	654 to 574	80	12.2
Southern	2 months, from December, 1920, to February, 1921	706 to 595	111	15.6
Virginian	3 months, from December, 1920, to March, 1921	108 to 81	27	25.0
A., T. & S. F.	3 months, from December, 1920, to March, 1921	932 to 753	179	19.2
C., & N. W.	6 months, from October, 1918, to April, 1919	922 to 696	226	24.5
G. N.	6 months, from October, 1918, to April, 1919	889 to 673	216	24.3
Sou. Pacific	3 months, from July, 1918, to October, 1919	1026 to 881	145	14.1
U. P.	4 months, from November, 1920, to March, 1921	799 to 390	409	51.2

The figures given in the tables are taken from reports of the railroads to the Interstate Commerce Commission and represent the number of employees in service at the middle of the months stated. Prior to 1914 this information was reported only by years; from 1915 to 1920, by quarters; since January 1, 1920, by months.

ROAD FREIGHT FIREMEN
Number of Employees at Middle of Month Stated.

EASTERN DISTRICT

		Baltimore & Ohio		Delaware Lackawanna & Western		Erie Railroad		New York Central		Pennsylvania R.R.		Pennsylvania System	
		Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative
1914	August	1147	100.	373	100.0	611	100.0	(1)		2056	100.0		
	October	1212	105.7	435	116.6	658	107.7	(1)		2159	105.0		
	December	989	86.2	427	114.5	599	98.0	(1)		2180	106.0		
1915	February	944	82.3	400	107.3	544	89.0	1226	100.0	2074	100.9		
	April	925	80.6	408	109.4	542	88.7	1120	91.4	1960	95.3		
	June	968	84.4	415	111.2	545	89.2	1165	95.0	1905	92.7		
	July	1165	101.6	381	102.1	586	95.9	1186	96.7	2080	101.2		
	October	1372	119.6	454	121.7	614	100.5	1429	116.6	2323	113.0		
1916	January	1488	129.7	427	114.5	792	129.6	1742	142.1	2613	127.1		
	April	1517	132.2	407	109.2	819	134.0	1849	150.8	2545	123.8		
	July	1717	149.7	424	113.7	796	130.3	(3)		2300	111.9		
	October	1651	143.9	444	119.1	879	143.9	(3)		2485	120.9		
1917	January	1711	149.2	431	115.5	859	140.6	1913	156.0	2719	132.2		
	April	1750	152.6	456	122.3	805	131.8	2179	177.7	2781	135.3		
	July	1957	170.6	473	126.8	873	142.9	1622	132.3	2855	138.9		
	October	1951	170.1	501	134.3	960	157.1	1756	143.2	3130	152.2		
1918	January	1940	169.2	516	138.3	970	158.8	2063	168.3	3389	164.8		
	April	1838	160.3	535	143.4	896	146.6	2039	166.3	3362	163.6		
	July	1903	165.9	546	146.4	890	145.7	1965	160.3	3517	171.1		
	October	1895	165.2	523	140.3	944	154.5	1929	157.3	3367	163.8		
1919	January	1887	164.5	522	140.0	745	123.9	1879	153.3	3409	165.8		
	April	1549	135.0	500	134.1	535	87.6	1365	111.3	2252	109.5		
	July	1552	135.3	499	133.8	550	90.0	1425	116.2	2572	125.1		
	October	1730	150.8	491	131.6	692	113.3	1548	126.3	2893	140.7		
1920	January	1713	149.3	480	128.7	639	104.6	1741	142.0			4474	217.6
	February	1628	141.9	486	130.3	695	113.7	1797	146.6			4417	214.8
	March	1707	148.8	497	133.2	775	126.8	1778	145.0			4287	208.5
	April	1508	131.5	436	116.9	458	75.0	1527	124.6			3699	179.9
	May	1676	146.1	461	123.6	654	107.0	1612	131.5			3955	192.4
	June	1700	148.2	488	130.8	666	109.0	1658	135.2			4151	201.9
	July	1724	150.3	490	131.4	738	120.8	1881	153.4			4505	219.1
	August	1924	167.7	510	136.7	753	123.2	1924	156.9			4447	216.3
	September	2062	179.8	493	132.2	752	123.1	1892	154.3			4945	240.5
	October	2142	186.7	486	130.3	867	141.9	1872	152.7			5122	249.1
	November	2041	177.9	503	134.8	864	141.4	2025	165.2			5493	267.2
	December	2058	179.4	510	136.7	770	126.0	2012	164.1			5492	267.1
1921	January	1874	163.3	(2)469	125.7	704	115.2	1165	95.3			5194	252.6
	February	1587	138.4	(2)474	127.1	676	110.6	1033	84.3			4839	235.4
	March	1468	128.0	(2)	132.2	597	97.7	912	74.4			4377	215.0

(1) Formed, by merger, in December, 1914.

(2) Includes Sussex R.R. and Lackawanna and Montrose R.R.

(3) Not reported.

ROAD FREIGHT FIREMEN
Number of Employees at Middle of Month Stated.

SOUTHERN DISTRICT

		Atlantic Coast Line		Louisville & Nashville		Norfolk & Western		Southern Ry.		Virginian Ry.	
		Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative
1914	August	367	100.0	441	100.			611	100.0	66	100.0
	October	332	90.5	426	96.6			605	99.0	56	84.8
	December	358	97.5	371	84.1			573	93.8	49	74.2
1915	February	273	74.4	407	92.3			517	84.6	53	80.3
	April	291	79.3	405	91.8			535	87.6	55	83.3
	June	313	85.3	401	90.1	527 (1)	100.	497	81.3	41	62.1
	July	355	96.7	631	143.1	767	145.5	656	107.3	67	101.5
	October	341	92.9	678	153.7	870	165.1	637	104.3	53	80.3
1916	January	493	134.3	678	153.7	835	158.4	683	111.8	70	106.1
	April	482	131.3	690	156.5	793	150.5	730	119.5	64	97.0
	July	373	101.6	668	151.5	1189	225.6	(2)		79	119.7
	October	377	102.7	698	158.3	1243	235.9	(2)		163	277.2
1917	January	406	110.6	721	163.5	1258	238.7	793	129.8	173	262.1
	April	383	104.4	721	163.5	807	153.1	831	136.0	187	283.3
	July	340	92.6	775	175.7	906	171.9	853	139.6	184	278.8
	October	357	97.3	851	193.0	907	172.1	837	137.0	196	296.9
1918	January	438	119.3	846	191.6	905	171.7	837	137.0	98	148.5
	April	509	138.7	917	207.9	897	170.2	823	134.7	114	172.7
	July	444	121.0	1038	235.4	915	173.6	813	133.1	119	180.3
	October	416	113.4	1020	231.3	924	175.3	879	143.9	129	195.4
1919	January	367	100.	893	202.5	758	143.8	762	124.7	106	160.6
	April	360	98.1	860	195.1	634	120.3	651	106.6	82	124.2
	July	359	97.8	930	210.9	667	126.6	685	112.1	86	130.3
	October	335	91.3	962	218.1	714	135.5	731	119.6	137	207.6
1920	January	379	103.3	1019	231.1	717	136.1	815	133.4	99	150.0
	February	422	115.0	992	224.9	696	132.1	780	127.7	86	130.3
	March	412	112.3	1034	234.5	680	129.0	820	134.2	93	140.9
	April	386	105.2	1008	228.6	649	123.1	769	125.9	101	153.0
	May	422	115.0	953	216.1	654	124.1	795	130.1	71	107.6
	June	414	112.8	990	224.5	676	128.3	806	131.9	94	142.4
	July	458	124.8	1018	230.8	686	130.2	795	130.1	97	147.0
	August	374	101.9	1065	241.5	702	133.2	765	125.2	89	134.8
	September	348	94.8	1068	242.2	708	134.3	743	121.6	102	154.5
	October	370	100.8	1076	244.0	675	128.1	754	123.4	100	151.5
	November	363	98.9	1051	238.3	668	126.8	732	119.8	100	151.5
	December	394	107.4	1060	240.4	654	124.1	706	116.5	108	163.6
1921	January	407	110.9	990	224.5	646	122.6	614	100.5	92	139.4
	February	379	103.3	956	216.8	600	113.9	595	97.4	96	145.5
	March	381	103.8	935	212.0	574	108.9	594	97.2	81	122.7

(1) The Norfolk & Western Ry. failed to report this information by months for the fiscal year 1915. The figure given is the average for the year.

(2) Information not reported.

ROAD FREIGHT FIREMEN

Number of Employees at Middle of Month Specified.

WESTERN DISTRICT

		Atchison, Topeka & Santa Fe		Chicago and Northwestern		Great Northern		Southern Pacific		Union Pacific		All Class I Roads	
		Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative
1914	August	680	100.	(1)		642	100.0	573	100.	(1)		(2)	
	October	698	102.6	(1)		717	111.7	587	102.5	404	100.0		
	December	622	91.5	(1)		574	89.4	517	90.2	(1)			
1915	February	606	89.1	(1)		510	79.4	475	82.9	(1)			
	April	617	90.7	(1)		460	71.7	504	88.0	298	73.8		
	June	636	93.5	676	100.	458	71.3	553	96.5	(1)			
	July	646	95.0	687	101.6	531	82.7	609	106.3	319	79.0		
	October	700	103.0	799	118.2	753	117.3	672	117.3	403	99.8		
1916	January	703	103.4	755	111.7	779	121.3	687	119.9	469	116.1		
	April	742	109.1	785	116.1	834	129.9	671	117.1	483	119.6		
	July	746	109.7	(1)		718	111.8	730	127.4	527	130.4		
	October	789	116.1	(1)		939	146.3	816	142.4	692	171.3		
1917	January	778	114.4	855	126.5	933	145.3	874	152.5	602	149.0		
	April	857	126.1	817	120.8	904	140.8	852	148.7	650	160.9		
	July	862	126.8	882	130.5	886	138.0	887	154.8	660	163.4		
	October	832	122.4	899	133.0	917	142.8	995	173.6	715	177.0		
1918	January	884	130.0	916	135.5	906	141.1	979	170.8	632	156.4		
	April	875	128.7	880	130.2	780	121.5	971	169.5	624	154.5		
	July	864	127.1	871	128.9	892	138.9	1026	179.1	651	161.1		
	October	932	137.1	922	136.4	889	138.5	881	153.8	690	170.8		
1919	January	877	129.0	784	116.0	722	112.5	910	158.9	763	188.9		
	April	764	112.4	696	102.9	673	104.8	794	138.6	531	131.4		
	July	856	125.9	819	121.2	768	119.6	1040	181.5	584	144.6		
	October	895	131.6	877	129.7	859	133.8	1057	184.5	760	188.1		
1920	January	907	133.4	844	124.9	838	130.5	1019	177.8	723	179.0	36,225	100.0
	February	862	126.8	821	121.5	823	128.2	1041	181.7	700	173.3	35,542	98.1
	March	874	128.5	859	127.1	807	125.7	1034	180.5	672	166.3	36,094	99.6
	April	816	120.0	756	111.8	754	117.4	905	157.9	665	164.6	32,107	88.6
	May	863	126.9	860	127.2	767	119.5	1020	178.0	619	153.2	34,369	94.9
	June	855	125.7	878	129.9	798	124.3	1136	198.3	610	151.0	35,054	96.8
	July	864	127.1	945	139.8	798	124.3	1088	189.9	627	155.2	36,197	99.9
	August	916	134.7	939	138.9	856	133.3	1092	190.6	664	164.4	36,951	102.0
	September	897	131.9	959	141.9	859	133.8	1094	190.9	722	178.7	37,613	103.8
	October	933	137.2	989	146.3	871	135.7	1118	195.1	800	198.0	38,590	106.5
	November	938	137.9	904	133.7	855	133.2	1123	196.0	799	197.8	38,241	105.6
	December	932	137.1	875	129.4	670	104.4	1066	186.0	704	174.3	37,050	102.3
1920	January	830	122.1	788	116.6	(3)		(3)		598	148.0	(3)	
	February	835	122.8	759	112.3	(3)		(3)		440	108.9	(3)	
	March	753	110.7	749	110.8	(3)		(3)		390	96.5	(3)	

(1) Not reported.

(2) Not compiled prior to 1920.

(3) Not available.

ROAD PASSENGER FIREMEN
Number of Employees at Middle of Month Stated.

EASTERN DISTRICT

		Baltimore & Ohio		Delaware, Lackawanna & Western		Erie R. R.		New York Central		Pennsylvania R.R.		Pennsylvania System	
		Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative
1914	August	360	100.	142	100.	258	100.	(1)		832	100.		
	October	359	99.7	139	97.9	220	85.3	(1)		768	92.3		
	December	341	94.7	131	92.3	207	80.2	(1)		792	95.2		
1915	February	339	94.2	133	93.7	203	78.7	803	100.	786	94.5		
	April	335	93.1	134	94.4	211	81.8	723	90.1	769	92.4		
	June	339	94.2	139	97.9	203	78.7	737	91.8	770	92.5		
	July	365	101.4	145	102.1	214	82.9	783	97.6	783	94.1		
	October	353	99.5	145	102.1	212	82.2	787	98.1	757	91.0		
1916	January	362	100.6	144	101.4	223	88.4	914	113.9	781	93.9		
	April	376	104.4	141	99.3	219	84.9	916	114.1	782	94.0		
	July	385	106.9	148	104.3	219	84.9	(3)		839	100.8		
	October	390	108.4	143	100.7	227	88.0	(3)		804	96.6		
1917	January	434	120.6	138	97.2	250	96.9	902	112.4	834	100.2		
	April	393	109.2	142	100.	242	93.8	925	115.2	832	100.		
	July	459	127.5	155	109.2	224	88.4	912	113.6	874	105.0		
	October	456	126.7	154	108.5	238	92.2	887	110.5	820	98.6		
1918	January	394	109.5	149	104.9	231	89.5	817	101.8	1086	130.5		
	April	416	115.6	149	104.9	239	92.6	784	97.6	1076	129.3		
	July	393	109.2	147	103.6	235	91.1	769	95.7	1082	130.0		
	October	379	105.3	143	100.8	220	85.3	776	96.6	1027	123.4		
1919	January	369	102.5	148	104.3	207	80.2	718	89.4	1035	124.4		
	April	355	98.6	145	102.1	168	65.1	699	87.1	1054	128.7		
	July	362	100.6	150	105.7	186	72.1	787	98.0	1095	131.6		
	October	360	100.	145	102.1	203	78.7	729	90.8	1081	129.9		
1920	January	363	100.8	143	100.7	193	74.8	785	97.7			1603	192.7
	February	364	101.1	129	90.8	199	77.1	752	93.6			1588	190.9
	March	368	102.2	130	91.5	212	82.2	749	93.3			1615	194.1
	April	356	98.9	169	119.0	119	46.1	786	97.9			1660	199.5
	May	357	99.2	133	93.7	212	82.2	786	97.9			1676	201.4
	June	367	101.9	142	100.	210	81.4	808	100.6			1689	203.0
	July	373	103.6	143	100.7	240	93.0	831	103.5			1725	207.3
	August	373	103.6	145	102.1	227	88.0	832	103.6			1685	202.5
	September	372	103.3	144	101.4	216	83.7	833	104.3			1685	202.5
	October	375	104.2	145	102.1	217	84.1	807	100.5			1644	197.6
	November	367	101.9	146	102.8	248	96.1	748	93.1			1720	206.7
	December	365	101.4	144	101.4	209	81.0	763	95.0			1711	205.6
1921	January	366	101.7	144 (2)	101.4	257	99.6	629	78.3			1757	211.2
	February	364	101.1	141 (2)	99.3	245	95.0	610	76.0			1770	212.8
	March	360	100.	140 (2)	98.6	250	96.9	605	75.3			1737	208.8

(1) Formed, by merger, in December, 1914.

(2) Includes Sussex Railroad and Lackawanna and Montrose Railroad.

(3) Not reported.

ROAD PASSENGER FIREMEN
Number of Employees at Middle of Month Stated.

SOUTHERN DISTRICT

		Atlantic Coast Line		Louisville & Nashville		Norfolk & Western		Southern Ry.		Virginian Ry.	
		Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative
1914	August	183	100.	138	100.			376	100.0	12	100.
	October	177	96.7	159	115.2			366	97.3	10	83.3
	December	167	91.3	156	113.0			343	91.2	10	83.3
1915	February	157	85.8	144	104.3			333	88.6	10	83.3
	April	152	83.1	164	118.8			320	85.1	10	83.3
	June	145	79.2	172	124.6	(1) 88	100.	316	84.0	10	83.3
	July	145	79.2	189	137.0	95	108.0	288	76.6	10	83.3
	October	158	86.3	186	134.8	106	120.5	308	81.9	32	266.7
1916	January	232	126.8	193	139.9	103	117.0	316	84.0	10	83.3
	April	220	120.2	190	137.7	112	127.3	305	81.1	30	250.0
	July	155	84.7	199	144.2	169	192.0	(2)		19	158.3
	October	169	92.3	198	143.5	172	195.5	(2)		10	83.3
1917	January	190	103.8	197	142.8	174	197.7	303	80.6	9	75.0
	April	191	104.4	202	146.4	114	129.5	307	81.6	10	83.3
	July	159	86.9	199	144.2	106	120.5	301	80.1	12	100.0
	October	167	91.3	201	145.7	104	118.2	304	80.9	12	100.0
1918	January	198	108.2	205	148.6	98	111.4	325	86.4	13	108.3
	April	184	100.5	213	154.4	85	96.6	325	86.4	12	100.0
	July	163	89.1	219	158.7	86	97.7	311	82.7	12	100.0
	October	172	94.0	200	144.9	101	114.8	322	85.6	11	91.7
1919	January	191	104.4	200	144.9	106	120.5	311	82.7	17	141.7
	April	184	100.5	188	136.3	106	120.5	320	85.1	12	100.0
	July	175	95.6	194	140.6	107	121.6	334	88.8	11	91.7
	October	180	98.4	194	140.6	95	108.0	327	87.0	14	116.7
1920	January	219	119.7	198	143.5	94	106.8	328	87.2	12	100.0
	February	209	114.2	200	144.9	92	104.5	328	87.2	13	108.3
	March	212	115.8	204	147.8	93	105.7	340	90.4	11	91.7
	April	199	108.7	199	144.2	92	104.5	331	88.0	12	100.0
	May	203	110.9	199	144.2	92	104.5	323	85.9	10	83.3
	June	202	110.4	202	146.4	92	104.5	330	87.8	10	83.3
	July	205	112.0	203	147.1	104	118.2	330	87.8	10	83.3
	August	179	97.8	202	146.4	99	112.5	330	87.8	11	91.7
	September	199	108.7	198	143.5	93	105.7	327	87.0	12	100.0
	October	195	106.6	203	147.1	95	108.0	329	87.5	6	50.0
	November	199	108.7	202	146.4	95	108.0	334	88.8	11	91.7
	December	213	116.4	209	151.4	95	108.0	330	87.8	11	91.7
1921	January	226	123.5	206	149.3	94	106.8	326	86.7	13	108.3
	February	212	115.9	209	151.5	94	106.8	326	81.4	14	116.7
	March	235	128.4	205	148.6	93	105.7	325	81.1	13	108.3

(1) The Norfolk & Western Ry. failed to report this information by months for the fiscal year 1915. The figure given is the average for the year.
 (2) Information not reported.

ROAD PASSENGER FIREMEN
Number of Employees at Middle of Month Stated

WESTERN DISTRICT
And All Class I Roads

		Atchison, Topeka & Santa Fe		Chicago and Northwestern		Great Northern		Southern Pacific		Union Pacific		All Class I Roads	
		Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative
1914	August	361	100.			362	100.	330	100.	(1)		(2)	
	October	381	105.6			329	90.9	283	85.8	214	100		
	December	364	100.9			319	88.1	294	89.1	(1)			
1915	February	400	110.9			285	78.7	288	87.3	(1)			
	April	408	113.1			324	89.5	311	94.2	205	95.8		
	June	438	121.3	465	100.	319	88.1	348	105.5	(1)			
	July	457	126.6	468	100.7	320	88.4	437	132.4	234	109.3		
	October	416	115.3	449	96.6	315	87.0	425	128.8	233	108.9		
1916	January	418	115.8	456	98.1	329	90.9	391	118.5	203	94.9		
	April	416	115.3	460	98.9	318	87.8	386	117.0	211	98.6		
	July	390	108.0	(1)		319	88.1	375	113.6	281	131.3		
	October	405	112.2	(1)		342	94.5	326	98.8	261	122.0		
1917	January	437	121.1	455	97.8	348	96.1	346	104.9	269	125.7		
	April	399	110.6	436	93.8	349	96.4	341	103.4	278	129.9		
	July	368	101.9	429	92.3	345	95.3	360	109.1	284	132.7		
	October	387	107.3	414	89.1	331	91.4	356	107.9	258	120.6		
1918	January	405	112.2	452	97.3	324	89.5	355	107.6	243	113.6		
	April	380	105.3	440	94.7	289	79.8	353	107.0	223	104.2		
	July	353	97.8	442	95.1	392	108.3	340	103.1	238	111.2		
	October	363	100.6	436	93.8	332	91.7	327	99.1	249	116.4		
1919	January	373	103.4	415	89.3	283	78.2	314	95.2	199	93.0		
	April	392	108.6	440	94.7	287	79.3	319	96.7	195	91.1		
	July	378	104.8	453	97.5	283	78.2	350	106.1	191	89.3		
	October	391	108.3	449	96.6	261	72.1	342	103.6	221	103.3		
1920	January	447	123.8	441	94.8	265	73.2	330	100.0	199	93.0	12,412	100.
	February	447	123.8	441	94.8	265	73.2	324	98.2	199	93.0	12,364	99.6
	March	415	115.0	431	92.7	268	74.0	321	97.3	221	103.3	12,430	100.1
	April	437	121.1	422	90.8	253	69.9	333	100.9	220	102.8	12,351	99.5
	May	433	119.9	445	95.7	257	71.0	365	110.6	217	101.4	12,602	101.5
	June	435	120.5	457	98.3	300	82.9	381	115.5	276	129.0	12,801	103.1
	July	428	118.6	464	99.8	277	76.5	380	115.2	218	101.9	13,069	105.3
	August	406	112.5	459	98.7	278	76.8	388	117.6	226	105.6	12,942	104.3
	September	410	113.6	457	98.3	276	76.2	356	107.9	254	118.7	12,906	104.0
	October	405	112.2	454	97.6	276	76.2	344	104.2	274	128.0	12,724	102.5
	November	440	121.9	451	97.0	270	74.6	355	107.6	241	112.6	12,853	103.6
	December	468	129.6	458	98.5	272	75.1	355	107.6	239	117.7	12,875	103.7
1921	January	477	132.1	445	95.7	(3)		(3)		226	105.6	(3)	
	February	468	129.6	442	95.1	(3)		(3)		218	101.9	(3)	
	March	445	123.3	431	92.7	(3)		(3)		222	103.7	(3)	

(1) Not reported.

(2) Not compiled prior to 1920.

(3) Not available.

YARD FIREMEN
Number of Employees at Middle of Month Stated.

EASTERN DISTRICT

		Baltimore & Ohio		Delaware, Lackawanna & Western		Erie R. R.		New York Central		Pennsylvania R. R.		Pennsylvania System	
		Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative
1914	August	496	100.	183	100.	280	100.	(1)		1187	100.		
	October	546	110.1	187	102.2	288	102.9	(1)		1198	100.9		
	December	462	93.1	198	108.2	278	99.3	(1)		1213	102.2		
1915	February	431	86.9	193	105.5	272	97.1	974	100.	1180	98.4		
	April	434	87.5	191	104.4	263	93.9	924	94.9	1166	98.2		
	June	436	87.9	186	101.6	266	95.0	925	95.0	1173	98.8		
	July	484	97.6	180	98.4	262	93.6	910	93.5	1183	99.7		
	October	600	121.0	204	111.5	292	104.3	1056	108.5	1302	109.7		
1916	January	655	132.0	232	126.8	353	126.1	1276	131.0	1475	124.3		
	April	685	138.1	228	124.6	398	142.1	1291	132.6	1493	125.8		
	July	638	140.7	205	112.0	355	126.8	(3)		1482	124.9		
	October	636	128.2	219	119.7	357	127.5	(3)		1512	127.4		
1917	January	662	133.5	227	124.0	386	137.9	1458	149.7	1596	134.5		
	April	739	149.0	237	129.5	388	138.6	1635	167.9	1665	140.3		
	July	979	197.4	246	134.4	353	126.1	1508	154.9	1953	164.5		
	October	989	199.4	254	138.8	440	157.1	1556	159.8	1937	163.2		
1918	January	963	194.1	250	136.6	430	153.6	1700	174.6	2210	186.2		
	April	908	183.1	260	142.1	396	141.4	1713	175.9	2233	188.1		
	July	974	196.4	251	137.1	412	147.1	1538	158.0	2418	203.7		
	October	974	196.4	259	141.5	400	142.9	1584	162.7	2200	185.3		
1919	January	875	176.4	258	141.0	377	134.6	1567	160.9	2326	196.0		
	April	674	135.9	250	136.6	302	107.9	1306	134.1	1784	150.3		
	July	744	150.0	261	142.6	325	116.1	1366	140.3	1947	164.0		
	October	830	167.3	270	147.5	360	128.6	1500	154.1	2078	175.1		
1920	January	844	170.2	284	155.2	381	136.1	1789	183.7			3429	288.9
	February	836	168.5	318	173.8	395	141.1	1662	170.6			3502	295.0
	March	847	170.8	321	175.4	418	149.3	1729	177.5			3640	306.7
	April	779	157.0	230	125.7	275	98.2	1482	152.2			3228	271.9
	May	808	162.9	267	145.9	334	119.3	1516	155.6			3187	268.5
	June	839	169.1	308	168.3	388	138.6	1433	147.1			3477	292.9
	July	860	173.4	313	171.0	391	139.6	1521	156.2			3546	298.7
	August	900	181.4	323	176.5	400	142.9	1580	162.2			3621	305.1
	September	942	189.9	324	177.0	432	154.3	1635	167.9			3520	296.5
	October	934	188.8	334	182.5	382	136.4	1643	168.7			3459	291.4
	November	911	183.7	341	186.3	380	135.7	1632	167.6			3600	303.3
	December	878	177.0	332	181.4	408	145.7	1554	159.5			3496	294.5
1921	January	759	153.0	284 (2)	155.2	319	113.9	1281	131.5			3181	268.2
	February	669	134.9	285 (2)	155.7	324	115.7	1116	114.6			2927	246.6
	March	651	131.3	285 (2)	155.7	310	110.7	1051	107.9			2703	227.7

(1) Formed by merger, in December, 1914.

(2) Includes Sussex Railroad and Lackawanna and Montrose Railroad.

(3) Not reported.

YARD FIREMEN
Number of Employees at Middle of Month Stated.

SOUTHERN DISTRICT

		Atlantic Coast Line		Louisville & Nashville		Norfolk & Western		Southern Ry.		Virginian Ry	
		Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative
1914	August	188	100.	223	100.0			341	100.0	11	100.0
	October	172	91.5	207	92.8			339	99.4	11	100.0
	December	176	93.6	204	91.5			338	99.1	10	90.9
1915	February	115	61.2	192	86.1			322	94.4	11	100.0
	April	156	83.0	198	88.8			312	91.5	11	100.0
	June	150	79.8	202	90.6	125 (1)	100	309	90.6	10	90.9
	July	143	76.1	222	99.5	149	119.2	282	82.7	12	109.1
	October	157	83.5	229	102.7	182	145.6	291	85.4	12	109.1
1916	January	215	114.4	241	108.1	177	141.5	288	84.5	19	172.7
	April	228	121.3	248	111.2	181	144.8	301	88.3	18	163.6
	July	152	80.9	278	124.7	179	145.2	(2)		30	272.7
	October	166	88.3	279	125.1	181	144.8	(2)		21	190.9
1917	January	182	96.8	307	137.7	188	150.4	301	88.3	19	172.7
	April	196	104.3	301	135.0	219	175.2	366	107.3	19	172.7
	July	195	103.7	322	144.4	265	212.0	407	119.4	20	181.8
	October	214	113.8	336	150.7	281	224.8	415	121.7	26	236.4
1918	January	257	136.7	385	172.6	293	234.4	472	138.4	28	254.5
	April	285	151.6	397	178.0	277	221.6	438	128.5	24	218.2
	July	248	131.9	439	196.8	285	228.0	505	148.1	24	218.2
	October	266	141.5	445	199.5	283	226.4	470	137.9	37	336.4
1919	January	259	137.8	399	178.9	257	205.6	481	141.1	27	245.5
	April	276	146.8	408	182.9	213	170.4	444	130.2	24	218.2
	July	253	134.6	436	195.5	248	198.4	424	124.4	29	263.6
	October	257	136.7	491	220.2	269	215.2	467	137.0	25	227.3
1920	January	287	152.7	507	227.4	273	218.4	514	150.7	30	272.7
	February	329	175.0	472	211.7	281	224.8	517	151.6	29	263.6
	March	302	160.6	504	226.0	286	228.8	515	151.0	27	245.5
	April	291	154.8	483	216.6	274	219.2	522	153.1	27	245.5
	May	299	159.0	499	223.8	273	218.4	535	156.9	27	245.5
	June	292	155.3	508	227.8	274	219.2	533	156.3	27	245.5
	July	322	171.3	510	228.7	283	226.4	538	157.7	25	227.3
	August	267	142.0	492	220.6	270	216.0	523	153.3	25	227.3
	September	281	149.5	499	223.8	277	221.6	503	147.5	24	218.2
	October	277	147.3	491	220.2	256	204.8	506	148.4	26	236.4
	November	270	143.6	487	218.4	253	202.4	501	146.9	27	245.5
	December	275	146.3	489	219.3	238	190.4	465	136.3	25	227.3
1921	January	272	144.7	458	205.4	210	168.0	402	117.9	23	209.1
	February	230	122.3	411	184.3	190	152.0	391	114.7	23	209.1
	March	256	136.2	416	186.5	179	143.2	389	114.1	19	172.7

(1) The Norfolk & Western Ry. failed to report this information by months for the fiscal year 1915. The figure given is the average for the year.

(2) Information not reported.

YARD FIREMEN
Number of Employees at Middle of Month Stated.

WESTERN DISTRICT
And All Class I Roads

		Atchison, Topeka & Santa Fe		Chicago and Northwestern		Great Northern		Southern Pacific		Union Pacific		All Class I Roads	
		Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative
1914	August	262	100.0			177	100.	218	100.0	(1)		(2)	
	October	280	106.9			201	113.6	230	105.5	136	100.		
	December	254	97.0			158	89.3	215.	98.6	(1)			
1915	February	259	98.9			154	87.0	179	82.1	(1)			
	April	249	95.0			137	77.4	201	92.2	105	77.2		
	June	247	94.3	378	100.0	135	76.3	191	87.5	(1)			
	July	269	102.7	378	100.0	150	84.7	218	100.0	99	72.8		
	October	274	104.6	451	119.3	200	113.0	245	112.4	119	87.5		
1916	January	293	111.8	463	122.5	219	123.7	262	120.2	102	75.0		
	April	280	106.9	436	115.3	209	118.1	250	114.7	93	68.4		
	July	292	111.5	(1)		224	126.6	242	111.0	105	77.2		
	October	325	124.1	(1)		214	120.9	277	127.1	152	111.8		
1917	January	351	134.0	446	118.0	253	142.9	270	123.8	137	100.7		
	April	371	141.6	451	119.3	320	180.8	285	130.7	170	125.0		
	July	399	152.3	548	145.0	318	179.7	355	162.8	186	136.8		
	October	443	169.1	522	138.1	378	213.6	408	187.1	242	177.9		
1918	January	421	160.7	556	147.1	382	215.8	393	180.3	265	194.9		
	April	414	158.0	500	132.3	384	216.9	395	181.2	229	168.4		
	July	415	158.4	516	136.5	406	229.4	403	184.9	235	172.8		
	October	443	169.1	572	151.3	449	253.7	411	188.5	247	181.6		
1919	January	430	164.1	514	136.0	383	216.4	390	178.9	196	144.1		
	April	389	148.5	511	135.2	326	184.2	377	172.9	191	140.4		
	July	431	164.5	505	160.1	364	205.6	399	183.0	210	154.4		
	October	522	199.2	629	166.4	403	227.7	418	191.7	284	208.8		
1920	January	493	188.2	624	165.0	398	224.9	424	194.5	270	198.5	23,811	100.0
	February	485	185.1	610	161.3	398	224.9	422	193.6	260	191.2	23,672	99.4
	March	485	185.1	622	164.5	378	213.6	412	189.0	240	176.5	23,974	100.7
	April	472	180.2	503	133.0	364	205.6	399	183.0	238	175.0	20,771	87.2
	May	483	184.4	583	154.2	390	220.3	393	180.3	230	169.1	21,755	91.4
	June	460	175.6	682	180.4	343	193.8	397	182.1	232	170.6	22,746	95.5
	July	485	185.1	679	179.6	386	218.1	406	186.2	253	186.0	22,925	96.3
	August	494	188.5	711	188.1	371	209.6	466	213.8	262	192.6	23,888	100.3
	September	490	187.0	730	193.1	377	213.0	446	204.6	284	208.8	24,001	100.8
	October	494	188.5	720	190.4	380	214.7	446	204.6	285	209.6	23,923	100.5
	November	499	190.5	696	184.1	367	207.3	442	202.7	287	211.0	23,792	99.9
	December	494	188.5	609	161.1	303	171.2	429	196.8	270	198.5	22,998	96.6
1921	January	453	172.9	566	149.7	(3)		(3)		241	177.2	(3)	
	February	419	159.9	516	136.5	(3)		(3)		207	152.2	(3)	
	March	396	151.1	515	136.2	(3)		(3)		200	147.1	(3)	

(1) Not reported.

(2) Not compiled prior to 1920.

(3) Not available.

ROAD FREIGHT ENGINEERS
Number of Employees at Middle of Month Stated.

EASTERN DISTRICT

		Baltimore & Ohio		Delaware		Erie Railroad		New York Central		Pennsylvania R.R.		Pennsylvania System	
		Number	Relative	Lackawanna & Western Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative
1914	August	1104	100.0	352	100.0	588	100.	(1)		1948	100.		
	October	1196	108.3	408	115.9	607	103.2	(1)		1987	102.0		
	December	983	89.0	421	119.7	579	98.5	(1)		2007	103.0		
1915	February	940	85.1	378	107.4	529	90.0	1145	100.0	1948	100		
	April	913	82.7	388	110.3	523	88.9	1055	92.1	1884	96.7		
	June	949	86.0	372	111.4	525	89.3	1082	94.5	1780	91.4		
	July	(3)		378	107.4	547	93.0	1098	95.9	1918	98.5		
	October	(3)		445	126.5	593	100.9	1323	115.6	2169	111.3		
1916	January	1435	130.0	425	120.8	730	124.1	1598	139.6	2410	123.7		
	April	1452	131.5	423	120.2	755	128.4	1696	148.1	2389	122.6		
	July	1573	142.5	419	119.1	776	132.0	(3)		2266	116.3		
	October	1535	139.0	427	121.3	799	135.9	(3)		2302	118.2		
1917	January	1588	143.8	428	121.6	803	136.6	1781	155.6	2509	128.8		
	April	1658	150.2	450	127.9	750	127.6	1770	154.6	2555	131.2		
	July	1726	156.3	461	131.0	866	147.3	1644	143.6	2601	133.5		
	October	1731	156.8	466	132.4	858	145.9	1700	148.5	2737	140.5		
1918	January	1697	153.7	490	139.3	842	143.2	1865	162.9	2979	152.9		
	April	1587	143.7	482	136.9	822	139.8	1869	163.2	2946	151.2		
	July	1619	146.6	483	137.2	751	127.7	1791	156.4	2860	146.8		
	October	1676	151.8	476	135.2	818	139.1	1785	155.9	2955	151.7		
1919	January	1679	152.1	472	134.1	719	122.3	1625	141.9	3058	157.0		
	April	1476	133.7	453	128.7	515	87.6	1220	106.6	2062	105.9		
	July	1419	126.5	462	131.3	539	91.7	1339	116.8	2368	121.6		
	October	1580	143.1	449	127.6	653	111.1	1439	125.7	2671	137.1		
1920	January	1573	142.5	444	126.1	723	123.0	1608	140.4			4210	216.11
	February	1543	139.8	447	127.0	668	113.6	1689	147.5			4113	211.1
	March	1583	143.4	458	130.1	726	123.5	1709	149.3			4099	210.4
	April	1378	124.8	398	113.1	450	76.5	1545	134.9			3774	193.7
	May	1535	139.0	422	119.9	615	104.6	1572	137.3			3783	194.2
	June	1577	142.8	451	128.1	623	106.0	1615	141.0			4015	206.1
	July	1602	145.1	454	129.0	673	114.5	1748	152.7			4204	215.8
	August	1753	158.8	460	130.7	696	118.4	1776	155.1			4105	210.7
	September	1742	157.8	448	127.3	719	122.3	1820	159.0			4596	235.9
	October	1794	162.5	441	125.3	840	142.9	1812	158.3			4730	242.8
	November	1790	162.1	458	130.1	839	142.7	1904	166.3			5079	260.7
	December	1803	163.3	467	132.7	786	133.7	1815	158.5			5142	264.0
1921	January	1661	150.5	(2)432	122.7	666	113.3	1718	150.0			4997	256.5
	February	1481	134.1	(2)432	122.7	622	105.8	1465	127.9			4383	225.0
	March	1401	126.9	(2)453	128.7	598	101.7	1376	120.2			3966	203.6

(1) Formed, by merger, in December, 1914.

(2) Includes Sussex R.R. and Lackawanna and Montrose R.R.

(3) Not reported.

ROAD FREIGHT ENGINEERS
Number of Employees at Middle of Month Stated.

SOUTHERN DISTRICT

		Atlantic Coast Line		Louisville & Nashville		Norfolk & Western		Southern Ry.		Virginian Ry.	
		Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative
1914	August	334	100.	485	100.			601	100.	49	100.
	October	319	95.5	439	90.5			572	95.2	46	94.0
	December	342	102.4	387	79.8			557	92.7	39	79.6
1915	February	272	81.4	424	87.4			498	82.9	42	85.7
	April	292	87.4	418	86.2			520	86.6	42	85.7
	June	301	90.1	414	85.4	526	(1) 100.	485	80.7	34	69.4
	July	336	100.6	577	119.0	697	132.5	579	96.4	50	102.1
	October	340	101.8	615	126.8	804	152.9	589	98.0	43	87.8
1916	January	478	143.1	622	128.2	768	146.0	634	105.5	58	118.4
	April	474	141.9	617	127.2	744	141.4	688	114.5	50	102.1
	July	355	106.3	616	127.0	1128	214.4	(2)		63	128.6
	October	353	105.7	649	133.8	1169	222.2	(2)		145	295.9
1917	January	364	109.0	681	140.4	1207	229.5	731	121.7	152	310.2
	April	351	105.1	654	134.8	774	147.1	788	131.1	172	351.0
	July	311	93.1	701	144.5	854	162.4	801	133.3	168	342.9
	October	335	100.3	721	148.7	844	160.5	800	133.1	174	355.1
1918	January	352	105.4	751	154.8	833	158.4	808	134.5	82	167.3
	April	429	128.4	799	164.7	834	158.6	789	131.3	105	214.3
	July	395	118.3	842	173.6	850	161.6	781	130.0	95	193.9
	October	381	114.1	834	172.0	853	162.2	870	144.8	95	193.9
1919	January	416	124.6	784	161.7	691	131.4	708	117.8	86	175.5
	April	344	103.0	754	155.5	601	114.3	643	107.0	66	134.7
	July	346	103.6	795	163.9	649	123.4	676	112.5	70	142.9
	October	321	96.1	812	167.4	683	129.8	730	121.5	123	251.0
1920	January	360	107.8	877	180.8	664	126.2	811	134.9	86	175.5
	February	352	105.4	848	174.8	671	127.6	775	129.0	74	151.0
	March	367	109.9	881	181.6	664	126.2	817	135.9	83	169.4
	April	365	109.3	843	173.8	633	120.3	771	128.3	86	175.5
	May	398	119.2	841	173.4	637	121.1	797	132.6	60	122.4
	June	381	114.1	862	177.7	656	124.7	807	134.3	81	165.3
	July	405	121.3	890	183.5	659	125.3	797	132.6	83	169.4
	August	342	102.4	921	189.9	676	128.5	760	126.5	80	163.3
	September	318	95.2	935	192.8	680	129.3	745	124.0	86	175.5
	October	335	100.3	929	191.5	648	123.2	753	125.3	85	173.5
	November	326	97.6	891	183.7	636	120.9	737	122.6	82	167.4
	December	356	106.6	898	185.2	626	119.0	710	118.1	91	185.7
1921	January	355	106.3	862	177.7	617	117.3	614	102.2	77	157.2
	February	351	105.1	838	172.8	583	110.8	598	99.5	73	149.0
	March	345	103.3	790	162.9	558	106.1	598	99.5	69	140.8

(1) The Norfolk and Western Ry. failed to report this information by months for the fiscal year 1915. The figure given is the average for the year.

(2) Information not reported.

ROAD FREIGHT ENGINEERS
Number of Employees at Middle of Month Stated.

WESTERN DISTRICT and
ALL CLASS I RAILS

13

		Atchison, Topeka & Santa Fe		Chicago and Northwestern		Great Northern		Southern Pacific		Union Pacific		All Class I Roads	
		Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative
1914	August	664	100.			547	100.	562	100.	(1)		(2)	
	October	673	101.4			601	109.9	587	104.4	373	100.		
	December	599	90.2			507	92.7	528	93.9	(1)			
1915	February	592	89.2			493	90.1	478	85.0	(1)			
	April	607	91.4			395	72.2	499	88.8	291	78.9		
	June	618	93.1	629	100.	400	73.1	539	95.9	(1)			
	July	639	96.2	658	104.6	488	89.2	576	102.5	299	80.2		
	October	687	103.5	805	128.0	686	125.4	669	119.0	378	104.3		
1916	January	688	103.6	762	121.1	704	128.7	667	118.7	429	115.0		
	April	732	110.2	822	130.7	732	133.8	674	119.9	432	115.8		
	July	728	109.6	(1)		672	122.9	737	131.2	490	131.4		
	October	775	116.7	(1)		775	141.7	846	150.5	622	166.8		
1917	January	757	114.0	829	131.8	764	139.7	845	150.4	553	148.3		
	April	820	123.5	800	127.2	750	137.1	857	152.5	593	159.0		
	July	806	121.4	828	131.6	806	147.3	885	157.5	595	159.5		
	October	830	125.0	812	129.1	827	151.2	985	175.3	674	180.7		
1918	January		129.4	866	137.7	841	153.7	989	176.0	578	155.0		
	April	859	125.5	848	134.8	724	132.4	935	166.4	477	127.9		
	July	858	129.2	867	137.8	760	139.9	960	170.8	589	157.9		
	October	871	131.2	911	144.8	795	145.3	865	153.9	627	168.1		
1919	January	919	133.4	772	122.7	647	118.3	915	145.0	613	165.7		
	April	711	107.1	687	109.2	603	111.2	795	141.5	525	140.8		
	July	790	119.0	707	125.1	721	131.8	917	163.2	533	142.9		
	October	837	126.1	871	138.5	786	143.7	935	166.4	672	180.2		
1920	January	869	130.9	839	133.4	776	141.9	917	163.2	643	172.4	33,856	100.
	February	833	125.5	819	130.2	766	140.0	903	160.7	627	168.1	33,254	98.2
	March	785	118.2	855	135.9	750	137.1	909	161.7	610	163.5	33,768	99.7
	April	776	116.9	756	120.2	692	126.5	849	151.1	604	161.9	30,722	90.7
	May	811	122.1	857	136.2	703	128.5	931	165.7	595	159.5	32,445	95.8
	June	845	127.3	873	138.8	719	131.4	991	176.3	607	162.7	33,225	99.1
	July	837	126.1	939	149.3	727	132.9	1030	183.3	628	168.4	34,080	100.7
	August	876	131.9	923	146.7	764	139.7	1006	179.0	662	177.5	34,499	101.9
	September	871	131.2	947	150.6	789	144.2	1027	182.7	682	182.8	35,076	103.6
	October	883	133.0	987	156.9	801	146.4	975	173.5	707	189.5	35,817	105.8
	November	921	138.7	898	142.8	763	139.5	978	174.0	648	175.7	35,443	104.7
	December	889	133.9	874	138.9	617	112.8	924	164.4	596	159.8	34,583	102.1
1921	January	804	121.1	789	125.4	(3)		(3)		512	137.3	(3)	
	February	792	119.3	756	120.2	(3)		(3)		438	117.4	(3)	
	March	737	111.0	746	118.6	(3)		(3)		421	112.9	(3)	

(1) Not reported.

(2) Not compiled prior to 1920.

(3) Not available.

ROAD PASSENGER ENGINEERS
Number of Employees at Middle of Month Stated.

EASTERN DISTRICT

		Baltimore & Ohio		Delaware, Lackawanna & Western		Erie R. R.		New York Central		Pennsylvania R. R.		Pennsylvania System	
		Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative
1914	August	356	100.0	142	100.	225	100.						
	October	355	99.7	139	97.9	222	98.7	(1)		845	100.		
	December	332	93.3	131	92.3	219	97.3	(1)		808	95.6		
								(1)		789	93.4		
1915	February	336	94.4	133	93.7	207	92.9	808	100.	792	93.7		
	April	332	93.3	134	94.4	208	92.4	749	92.7	778	92.1		
	June	339	95.2	139	97.9	201	89.3	762	94.3	791	93.6		
	July	357	100.3	146	102.0	209	92.9	823	101.9	817	96.7		
	October	364	102.2	149	104.9	211	93.8	800	99.0	796	94.2		
1916	January	362	101.7	142	100.	233	103.6	901	111.5	800	94.7		
	April	375	105.3	142	100.	224	99.6	904	111.9	800	94.7		
	July	384	107.9	150	105.6	233	103.6			1035	122.5		
	October	387	108.7	143	100.7	227	100.9	(3)		840	99.4		
								(3)					
1917	January	431	121.1	138	97.2	244	108.4	912	112.9	874	103.4		
	April	395	111.0	142	100.	245	108.9	952	117.8	846	100.1		
	July	452	127.0	155	109.2	233	103.6	928	114.9	868	102.7		
	October	460	129.2	152	107.0	238	105.8	887	109.8	870	103.0		
1918	January	431	121.1	150	105.6	243	108.0	846	104.7	1095	129.6		
	April	411	115.4	148	104.2	246	103.3	804	99.5	1159	137.2		
	July	365	102.8	148	104.2	235	104.4	793	98.1	1139	134.8		
	October	377	105.9	144	101.4	234	104.0	786	97.3	1101	130.3		
1919	January	360	101.1	142	100.	211	93.8	754	93.3	1079	127.7		
	April	357	100.3	147	103.5	188	83.6	719	89.0	1080	127.8		
	July	360	101.1	150	105.6	201	89.3	804	99.5	1147	135.7		
	October	362	101.7	144	101.4	208	92.4	748	92.6	1124	133.0		
1920	January	359	100.8	143	100.7	210	93.3	799	98.9			1677	198.5
	February	362	101.7	130	91.5	208	92.4	760	94.1			1693	200.4
	March	364	102.2	129	90.8	213	94.7	778	96.3			1711	202.5
	April	352	98.9	105	73.9	131	58.2	774	98.3			1690	200.0
	May	353	99.2	131	92.3	332	174.2	793	98.1			1733	205.1
	June	363	102.0	144	101.4	208	92.4	817	101.1			1680	222.5
	July	369	103.7	145	102.1	208	92.4	848	105.0			1894	224.1
	August	370	103.9	146	102.8	221	98.2	837	103.6			1859	220.0
	September	369	103.7	145	102.1	230	102.2	831	102.8			1780	210.7
	October	371	104.2	146	102.8	287	127.6	853	102.4			1725	204.1
	November	364	102.2	148	104.2	282	125.3	759	93.9			1770	209.5
	December	364	102.2	144	101.4	238	105.8	793	98.1			1771	209.6
1921	January	364	102.2	144 (2)	101.4	234	104.0	814	100.7			1793	212.2
	February	365	102.5	138 (2)	97.2	220	97.8	789	97.6			1762	208.5
	March	363	102.0	139 (2)	97.9	220	97.8	768	95.1			1735	205.3

(1) Former, by merger, in December, 1914.

(2) Includes Sussex Railroad and Lackawanna and Montrose Railroad.

(3) Not reported.

ROAD PASSENGER ENGINEERS
Number of Employees at Middle of Month Stated.

SOUTHERN DISTRICT

		Atlantic Coast Line		Louisville & Nashville		Norfolk & Western		Southern Ry.		Virginian Ry.	
		Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative
1914	August	177	100.	138	100.			374	100.	10	100.0
	October	170	96.0	161	116.7			367	98.1	8	80.0
	December	160	90.4	156	113.0			344	92.0	8	80.0
1915	February	153	86.4	144	104.3			334	89.3	9	90.0
	April	143	80.8	163	118.1			317	84.8	8	80.0
	June	145	81.9	172	124.6	91 (1)	100.	315	84.8	8	80.0
	July	144	81.4	189	137.0	92	101.1	289	77.3	10	100.0
	October	156	88.1	186	134.8	101	111.0	306	81.8	28	280.0
1916	January	226	127.7	193	139.9	102	112.1	312	83.4	10	100.0
	April	218	123.2	188	136.2	107	117.6	307	82.1	37	370.0
	July	154	87.0	197	142.8	159	174.7	(2)		14	140.0
	October	160	90.4	196	142.0	162	178.0	(2)		62	620.0
1917	January	172	97.2	196	142.0	169	185.7	302	80.8	10	100.0
	April	172	97.2	201	145.7	104	114.3	307	82.1	10	100.0
	July	155	87.6	198	143.5	105	115.4	304	81.3	12	120.0
	October	163	92.1	199	144.2	101	111.0	309	82.6	12	120.0
1918	January	184	104.0	202	146.4	97	106.6	324	86.6	9	90.0
	April	160	90.4	201	145.7	83	92.2	326	87.2	9	90.0
	July	128	72.3	208	150.7	85	93.4	312	83.4	11	110.0
	October	170	96.0	188	136.2	98	107.7	322	86.1	11	110.0
1919	January	175	98.9	198	143.5	100	109.9	311	83.2	13	130.0
	April	193	109.0	187	135.5	101	111.0	321	85.8	12	120.0
	July	168	94.9	193	139.9	95	104.4	334	89.3	11	110.0
	October	175	98.9	191	138.4	97	106.6	327	87.4	14	140.0
1920	January	202	114.1	198	143.5	94	103.3	328	87.7	11	110.0
	February	197	111.3	199	144.2	92	101.1	327	87.4	12	120.0
	March	193	109.0	201	145.7	93	102.2	340	90.9	12	120.0
	April	184	104.0	198	143.5	91	100.0	332	88.8	13	130.0
	May	188	106.2	259	187.7	90	98.9	326	87.2	12	120.0
	June	188	106.2	202	146.4	91	100.0	331	88.5	12	120.0
	July	191	107.9	201	145.7	104	114.3	331	88.5	12	120.0
	August	174	98.3	203	147.1	99	108.8	331	88.5	12	120.0
	September	180	101.7	198	143.5	93	102.2	328	87.7	14	140.0
	October	184	104.0	203	147.1	95	104.4	330	88.2	12	120.0
	November	191	107.9	202	146.4	95	104.4	336	89.8	13	130.0
	December	201	113.6	209	151.4	95	104.4	331	88.5	13	130.0
1921	January	212	119.8	206	149.3	94	103.3	327	87.4	13	130.0
	February	197	111.3	209	151.4	93	102.2	307	82.1	15	150.0
	March	217	122.6	205	148.6	92	101.1	306	81.8	13	130.0

- (1) The Norfolk & Western Ry. failed to report this information by months for the fiscal year 1915. The figure given is the average for the year.
 (2) Information not reported.

ROAD PASSENGER ENGINEERS
Number of Employees at Middle of Month Stated.

WESTERN DISTRICT & ALL CLASS I ROADS

		Atchison, Topeka & Santa Fe		Chicago and Northwestern		Great Northern		Southern Pacific		Union Pacific		All Class I Roads	
		Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative
1914	August	377	100.			308	100.0	454	100.	(1)			
	October	387	102.7			287	93.2	407	89.7	212	100.		
	December	376	99.7			280	90.9	402	88.6	(1)			
1915	February	405	107.4			293	95.1	402	88.6	(1)			
	April	414	109.8			298	96.8	423	93.2	205	96.7		
	June	453	120.2	445	100.	305	99.0	487	107.3	(1)			
	July	472	125.2	448	100.7	299	97.1	581	128.0	243	114.6		
	October	418	110.9	454	102.0	286	92.9	563	124.0	243	114.6		
1916	January	430	114.1	455	102.2	303	98.4	531	117.0	221	104.2		
	April	410	108.8	463	104.0	287	93.2	522	115.0	220	103.8		
	July	392	104.0	(2)		293	95.1	515	113.5	281	132.5		
	October	400	106.1	(2)		305	99.0	477	105.1	237	111.8		
1917	January	441	117.0	457	102.7	329	106.8	470	103.5	246	116.0		
	April	408	108.2	441	99.1	316	102.6	480	105.7	253	119.3		
	July	372	98.7	435	97.7	324	105.2	483	106.4	259	122.2		
	October	389	103.2	424	95.3	309	100.3	533	117.4	243	114.6		
1918	January	406	107.7	455	102.2	310	100.6	476	104.9	266	125.5		
	April	388	102.9	441	99.1	272	88.3	485	106.8	254	119.8		
	July	348	92.3	431	96.8	360	116.9	471	103.8	229	108.0		
	October	351	93.1	432	97.1	327	106.2	455	100.2	227	107.1		
1919	January	378	100.3	408	91.7	256	83.1	446	98.3	198	93.4		
	April	393	104.2	436	98.0	266	86.4	443	97.6	203	95.8		
	July	371	98.4	449	100.9	266	86.4	461	101.6	239	112.7		
	October	394	104.5	449	100.9	256	83.1	452	99.6	229	108.0		
1920	January	442	117.2	442	99.3	257	83.4	453	99.8	228	107.5	12,793	100.
	February	427	113.3	439	98.7	259	84.1	471	103.7	230	108.5	12,757	99.7
	March	408	106.2	428	96.2	263	85.4	463	102.0	255	120.3	12,868	100.6
	April	426	113.0	419	94.2	246	79.9	442	97.4	74	134.9	12,428	97.1
	May	421	111.7	444	99.8	251	81.5	463	102.0	255	120.3	13,105	102.4
	June	417	110.6	455	102.2	282	91.6	506	111.5	243	114.6	13,291	103.9
	July	418	110.9	459	103.1	274	89.0	533	117.4	246	116.0	13,531	105.8
	August	406	107.7	453	101.8	263	85.4	519	114.3	253	119.3	13,458	105.2
	September	405	107.4	452	101.6	261	84.7	505	111.2	266	125.5	13,331	104.2
	October	398	105.6	448	100.7	265	86.0	450	99.1	271	127.8	13,190	103.1
	November	436	115.7	450	101.1	259	84.1	460	101.3	258	121.9	13,206	103.2
	December	469	124.4	454	102.0	260	84.4	462	101.8	241	113.7	13,262	103.7
1921	January	477	126.5	444	99.8	(3)		(3)		233	109.9	(3)	
	February	466	123.6	441	99.1	(3)		(3)		244	105.7	(3)	
	March	441	117.0	429	96.4	(3)		(3)		226	106.6	(3)	

(1) Not reported

(2) Not compiled prior to 1920.

(3) Not available.

YARD ENGINEERS
Number of Employees at Middle of Month Stated.

EASTERN DISTRICT

		Baltimore & Ohio		Delaware Lackawanna & Western		Erie Railroad		New York Central		Pennsylvania R.R.		Pennsylvania System	
		Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative
1914	August	489	100.0	184	100.0	298	100.	(1)		1167	100.		
	October	540	110.4	188	102.2	292	98.0	(1)		1184	101.5		
	December	456	93.3	198	107.6	269	90.3	(1)		1191	102.1		
1915	February	426	87.1	194	105.4	274	92.0	957	100.0	1199	102.7		
	April	432	88.3	192	104.4	261	87.6	920	96.1	1152	98.7		
	June	439	89.8	187	101.6	268	89.9	928	97.0	1185	101.5		
	July	478	97.8	180	97.8	265	88.9	914	95.5	1180	101.1		
	October	580	118.6	205	111.4	284	95.3	1064	111.2	1256	107.6		
1916	January	643	131.5	232	126.1	343	115.1	1266	132.3	1490	127.7		
	April	667	136.4	227	123.4	355	119.1	1304	136.3	1489	127.6		
	July	682	139.5	205	111.4	362	122.5	(3)		1490	127.7		
	October	622	127.2	218	118.5	343	115.1	(3)		1506	129.0		
1917	January	659	134.4	226	122.8	361	121.2	1402	146.5	1514	129.7		
	April	716	146.4	238	129.3	361	121.2	1553	162.3	1613	138.2		
	July	954	195.1	247	134.2	332	111.4	1474	154.0	1957	167.7		
	October	964	197.1	255	138.6	423	142.0	1505	157.3	1920	164.5		
1918	January	941	192.4	252	137.0	418	140.3	1667	174.2	2082	178.4		
	April	912	186.5	262	142.4	399	133.9	1722	179.9	2243	192.2		
	July	970	198.4	251	136.4	403	135.2	1526	159.5	2299	197.0		
	October	1004	205.3	259	140.8	409	137.3	1580	165.1	2356	201.9		
1919	January	853	174.4	258	140.2	371	124.5	1491	155.8	2355	201.8		
	April	667	136.4	250	135.9	326	109.4	1279	133.7	1818	155.8		
	July	741	151.5	261	141.8	325	109.1	1321	138.0	1917	164.3		
	October	831	169.9	270	146.7	367	123.2	1503	157.1	1996	171.0		
1920	January	850	173.8	284	154.3	412	138.3	1739	181.7			3435	294.3
	February	851	174.0	320	173.9	405	135.9	1640	171.4			3477	297.0
	March	865	176.9	321	174.5	410	137.6	1666	174.1			3585	307.2
	April	857	175.3	230	125.0	284	95.3	1456	152.1			3082	264.1
	May	841	172.0	267	145.1	370	124.2	1488	155.5			3401	291.1
	June	857	175.3	308	167.4	391	131.2	1387	144.9			3518	301.5
	July	866	177.1	313	170.1	392	131.6	1511	157.9			3461	296.6
	August	905	185.1	323	175.5	341	114.4	1548	161.8			3489	299.0
	September	928	189.8	324	176.1	400	134.2	1611	168.3			3500	299.9
	October	920	188.1	334	181.5	391	131.2	1616	168.9			3498	299.7
	November	914	186.9	341	185.3	373	125.2	1579	165.0			3574	306.3
	December	886	181.2	320	173.9	391	131.2	1525	159.3			3464	296.8
1921	January	769	157.3	(2) 284	154.4	320	107.4	1440	150.5			3182	272.7
	February	684	139.9	(2) 285	154.9	317	106.4	1184	123.7			2879	246.7
	March	663	135.6	(2) 285	154.9	309	103.7	1112	116.2			2626	225.0

(1) Formed, by merger, in December, 1914.

(2) Includes Sussex R.R. and Lackawanna and Montrose R.R.

(3) Not reported.

YARD ENGINEERS
Number of Employees at Middle of Month Stated.

SOUTHERN DISTRICT

		Atlantic Coast Line		Louisville & Nashville		Norfolk & Western		Southern Ry.		Virginian Ry.	
		Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative
1914	August	186	100.	221	100.			300	100.	11	100.
	October	163	90.9	205	92.8			279	93.0	11	100.
	December	169	90.9	204	92.3			278	92.7	10	90.9
1915	February	115	61.8	194	87.8			267	89.0	11	100.
	April	156	83.9	199	90.0			258	86.0	11	100.
	June	149	80.1	201	91.0	124 (1)	100.	255	85.0	10	90.9
	July	161	86.6	222	100.4	147	118.6	266	88.7	12	109.1
	October	165	88.7	225	101.8	160	136.3	280	93.3	11	100.
1916	January	195	104.8	237	107.2	169	136.3	366	95.3	13	118.2
	April	240	129.0	247	111.8	166	133.9	299	99.7	14	127.3
	July	160	86.0	274	124.0	175	141.1	(2)		18	163.6
	October	165	88.7	274	124.0	177	142.8	(2)		14	127.3
1917	January	174	93.5	300	135.7	178	143.6	293	97.7	17	154.5
	April	184	98.9	293	132.6	217	175.0	358	119.3	17	154.5
	July	186	100.	316	143.0	248	200.0	391	130.3	18	163.6
	October	202	108.6	336	152.0	262	211.3	399	133.0	21	190.9
1918	January	222	119.3	375	169.7	260	216.0	455	151.7	22	200.0
	April	241	129.6	385	174.2	260	209.7	442	147.3	23	209.1
	July	227	122.0	426	192.8	280	225.8	493	164.3	24	218.2
	October	236	126.9	407	184.2	277	223.4	470	156.7	29	263.6
1919	January	(3) 38	20.4	393	177.8	241	194.4	476	158.7	26	236.4
	April	265	142.5	304	178.3	215	173.4	444	148.0	22	200.0
	July	244	131.2	420	190.1	235	189.5	426	142.0	27	245.5
	October	241	129.6	457	206.8	263	212.1	469	156.3	25	227.3
1920	January	255	137.1	502	227.1	266	214.5	517	172.3	28	254.5
	February	280	150.5	483	218.5	271	218.6	520	173.3	27	245.5
	March	280	150.5	493	223.1	269	216.9	517	172.3	25	227.3
	April	281	151.1	474	214.5	264	212.9	560	186.6	27	245.5
	May	291	156.4	492	222.6	264	212.9	521	173.6	27	245.5
	June	280	150.5	493	223.1	267	215.3	535	178.3	26	236.4
	July	297	159.7	500	226.2	275	221.8	542	180.6	24	218.2
	August	260	139.8	485	219.5	263	212.1	526	175.3	23	209.1
	September	250	139.2	487	220.4	268	216.1	506	168.6	23	209.1
	October	270	145.2	487	220.4	250	201.6	509	169.6	24	218.2
	November	263	141.4	486	219.9	247	199.2	505	168.3	26	236.4
	December	266	143.0	480	217.2	233	187.9	467	155.7	25	227.3
1921	January	245	131.7	452	204.5	207	167.0	406	135.3	22	200.0
	February	252	135.5	407	184.2	185	149.2	384	128.0	21	190.9
	March	243	130.7	411	186.0	176	142.0	382	127.3	18	163.6

(1) The Norfolk & Western failed to report this information by months for the fiscal year 1915. The figure given is the average for the year.

(2) Information not reported.

(3) Apparently wrong, but reported thus to the Interstate Commerce Commission.

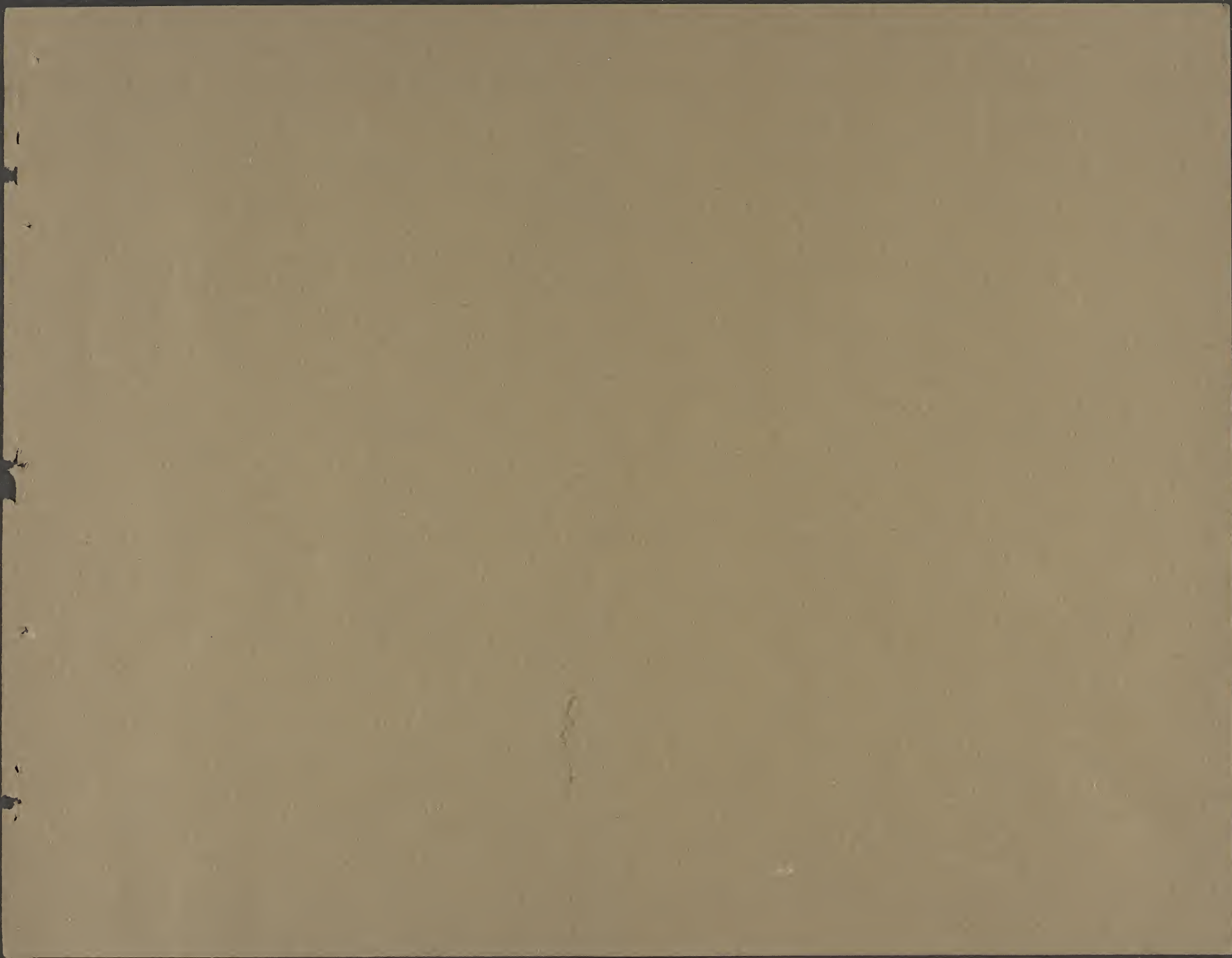
YARD ENGINEERS
Number of Employees at Middle of Month Stated.

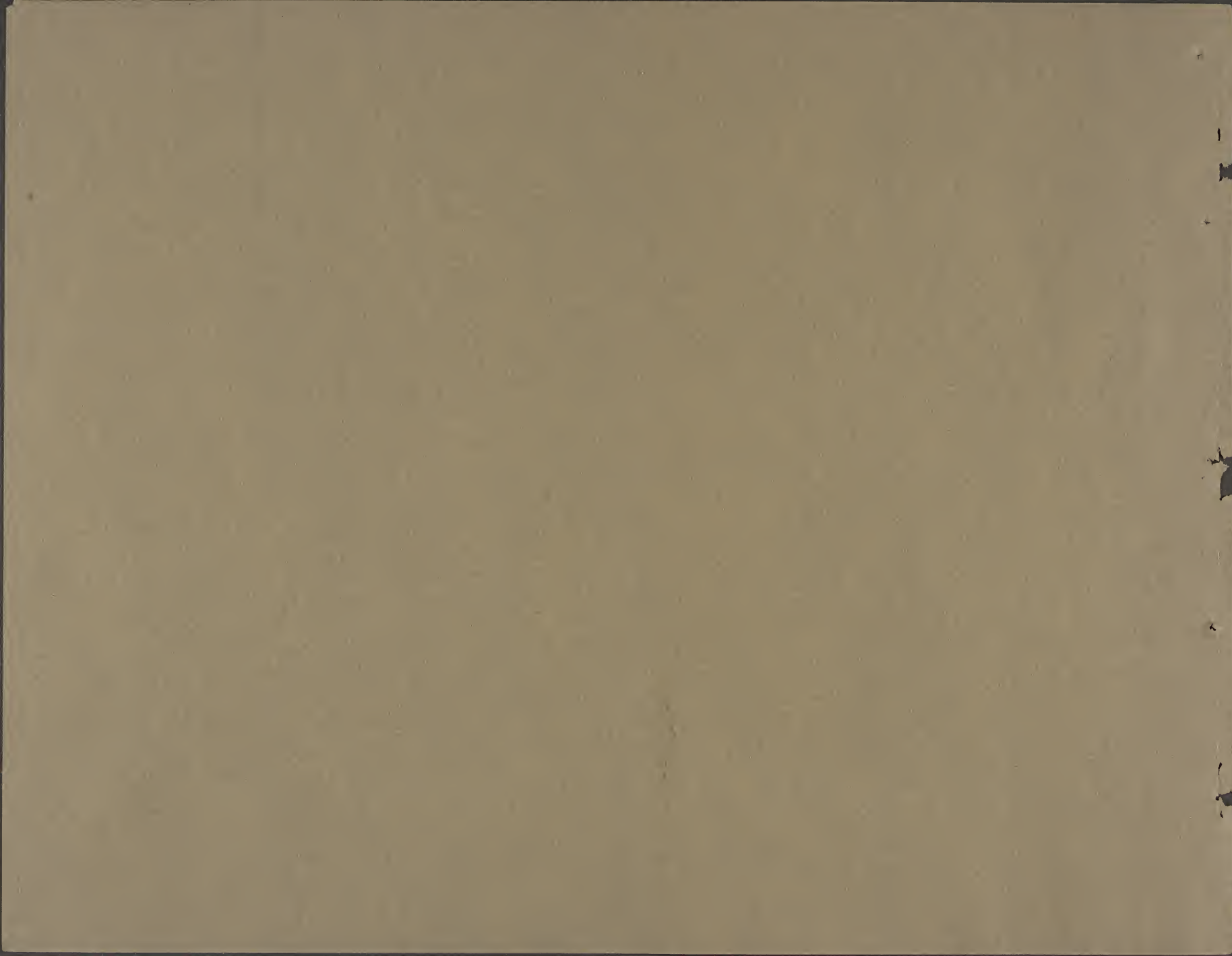
WESTERN DISTRICT
AND ALL CLASS I ROADS

		Atchison, Topeka & Santa Fe		Chicago and Northwestern		Great Northern		Southern Pacific		Union Pacific		All Class I Roads	
		Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative	Number	Relative
1914	August	265	100.0			186	100.	208	100.0	(1)		(2)	
	October	278	104.9			194	104.3	235	113.0	133	100.		
	December	254	95.8			150	80.6	204	98.1	(1)			
1915	February	261	98.5			147	79.0	180	86.5	(1)			
	April	256	96.6			134	72.0	195	93.7	105	78.9		
	June	250	94.4	375	100.0	133	71.5	198	95.2	(1)			
	July	275	103.8	375	100.0	146	78.5	224	107.7	104	78.2		
	October	284	107.2	455	121.3	200	107.5	248	119.2	120	90.2		
1916	January	291	109.8	455	121.3	219	117.7	233	112.0	111	83.5		
	April	274	103.4	428	114.1	205	110.2	236	113.5	97	72.9		
	July	275	103.8	(1)		221	118.8	249	119.7	108	81.2		
	October	312	117.7	(1)		213	114.5	267	128.4	149	112.0		
1917	January	340	128.3	449	119.7	244	131.2	256	123.1	148	111.3		
	April	360	135.9	444	118.4	290	155.9	276	132.7	168	126.3		
	July	391	147.6	526	140.3	310	166.7	357	171.6	187	140.6		
	October	425	160.4	507	135.2	380	204.3	393	188.9	237	178.2		
1918	January	422	159.3	555	148.0	366	196.8	401	192.8	224	168.4		
	April	425	160.4	497	132.5	356	191.4	391	188.0	230	172.9		
	July	413	155.9	510	136.0	419	225.3	400	192.3	235	176.7		
	October	456	172.1	565	150.7	413	222.0	405	194.7	247	185.7		
1919	January	424	160.0	499	133.1	353	189.8	395	189.9	186	139.9		
	April	389	146.8	501	133.6	299	160.7	373	179.3	189	142.1		
	July	414	156.2	582	155.2	360	193.5	401	192.8	205	154.1		
	October	509	192.1	625	166.7	403	216.7	420	201.9	260	195.5		
1920	January	488	184.1	623	166.1	383	205.9	428	205.8	259	194.7	23,541	100.
	February	476	179.6	606	161.6	382	205.4	418	201.0	249	187.2	23,326	99.1
	March	465	175.6	622	165.9	371	199.4	411	197.6	248	186.5	23,738	100.8
	April	458	172.8	504	134.4	350	188.2	384	184.6	243	182.7	20,805	88.4
	May	461	174.0	586	156.3	395	212.4	381	183.2	242	182.0	21,767	92.5
	June	467	176.2	679	181.1	334	179.6	381	183.2	239	179.7	22,471	95.5
	July	472	178.1	677	180.5	334	179.6	394	189.4	248	186.5	22,686	96.4
	August	471	177.7	699	186.4	344	184.9	428	205.8	255	191.7	23,317	99.0
	September	464	175.1	710	189.3	378	203.2	440	211.5	276	207.5	23,674	100.6
	October	478	180.4	717	191.2	369	198.4	420	201.9	279	209.8	23,747	100.9
	November	483	182.3	694	185.1	355	190.8	414	199.0	298	224.1	23,400	99.4
	December	485	183.0	608	162.1	295	158.6	405	194.7	255	191.7	22,560	95.8
1921	January	447		542	149.9			(3)		220	165.5	(3)	
	February	412		515	137.3			(3)		216	162.4	(3)	
	March	388		513	136.8			(3)		209	157.2	(3)	

(1) Not reported.
(3) Not available.

(2) Not compiled prior to 1920.





BEFORE THE UNITED STATES RAILROAD LABOR BOARD

EXHIBIT No. 3

FLUCTUATION IN NUMBER OF FIREMEN AND
ENGINEERS EMPLOYED
1914-1921

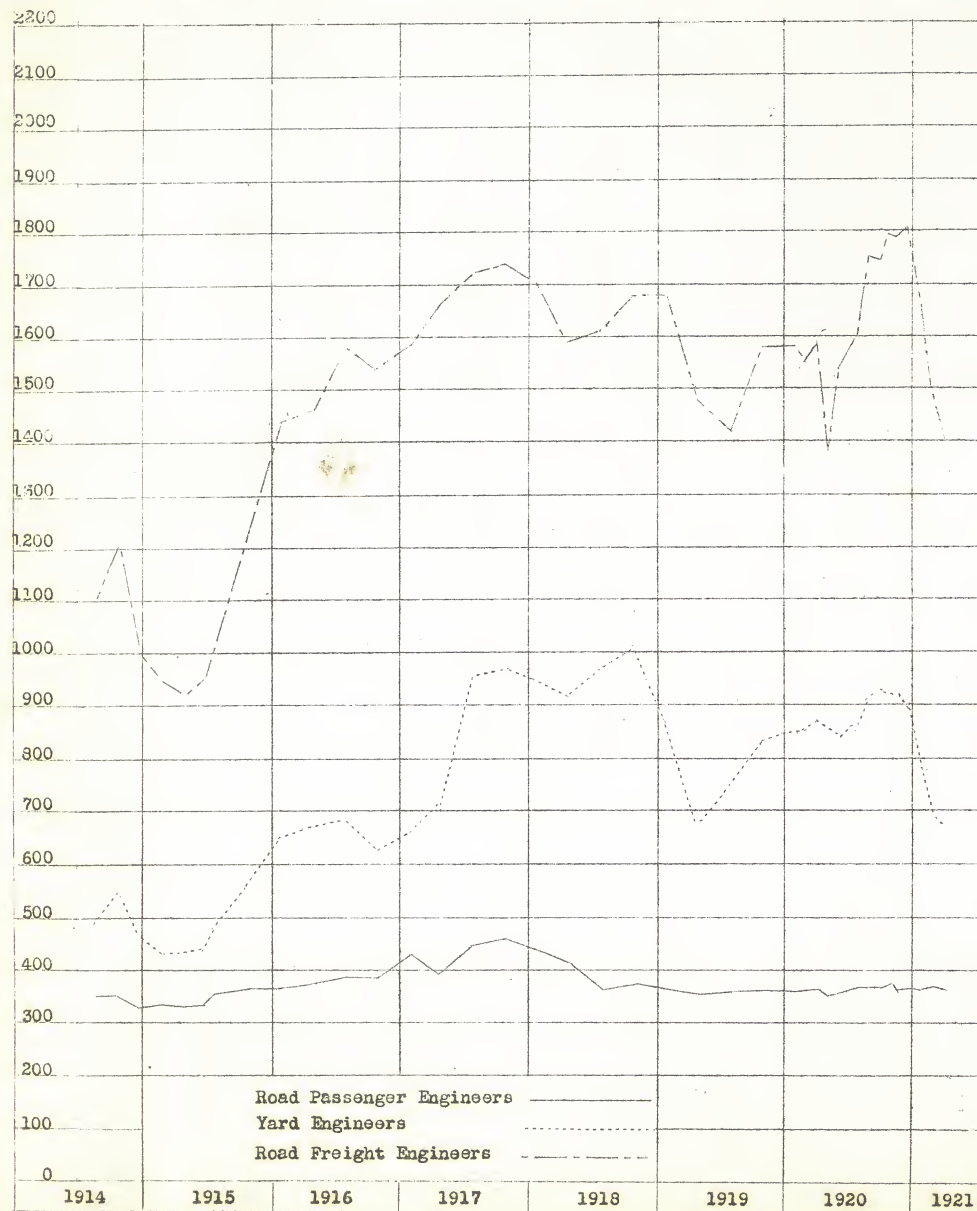
Part II. Charts.

Presented by
W. S. CARTER,
President, Brotherhood of Locomotive
Firemen and Enginemen.

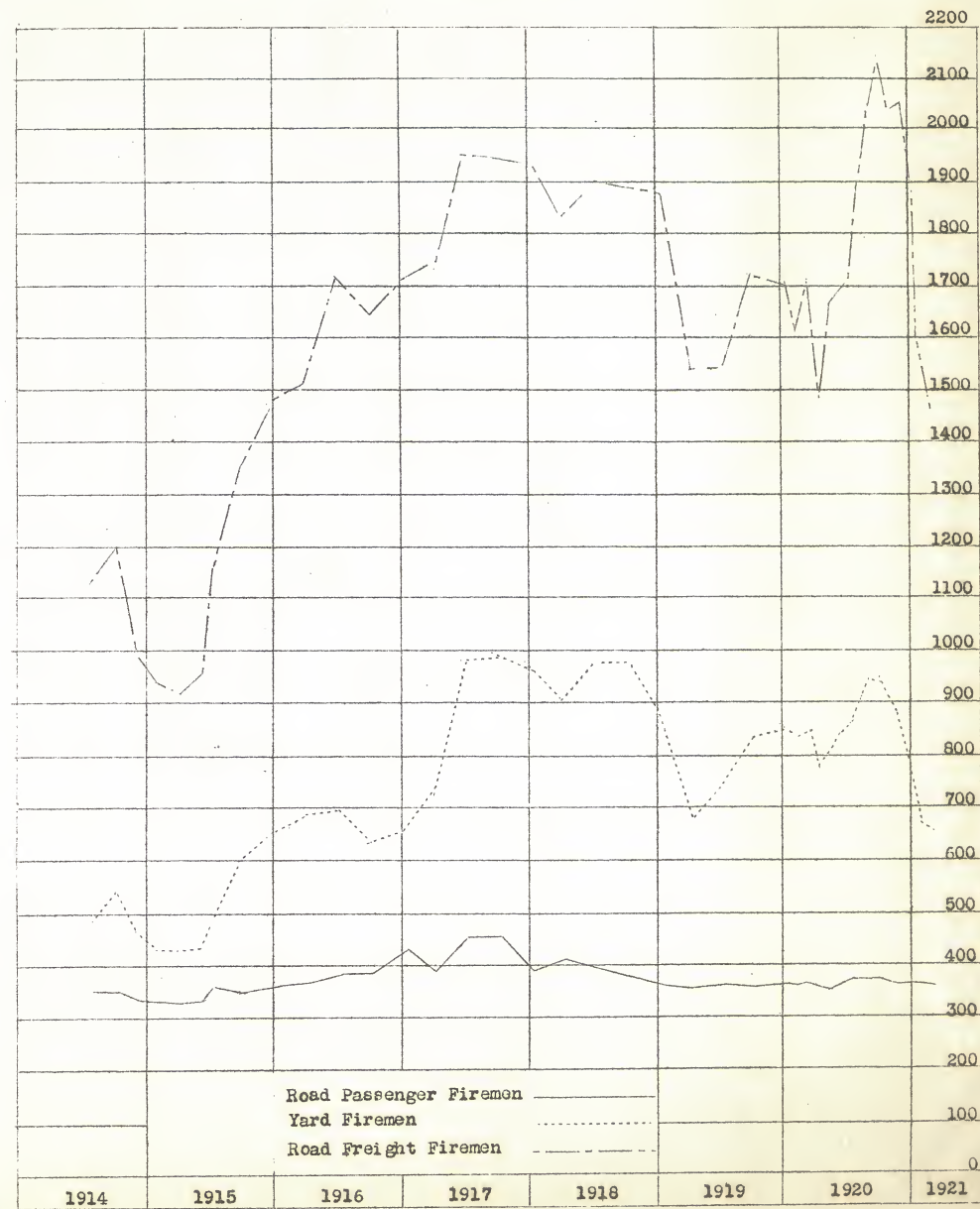
Chicago
1921

87/2
Land = Russian
12022

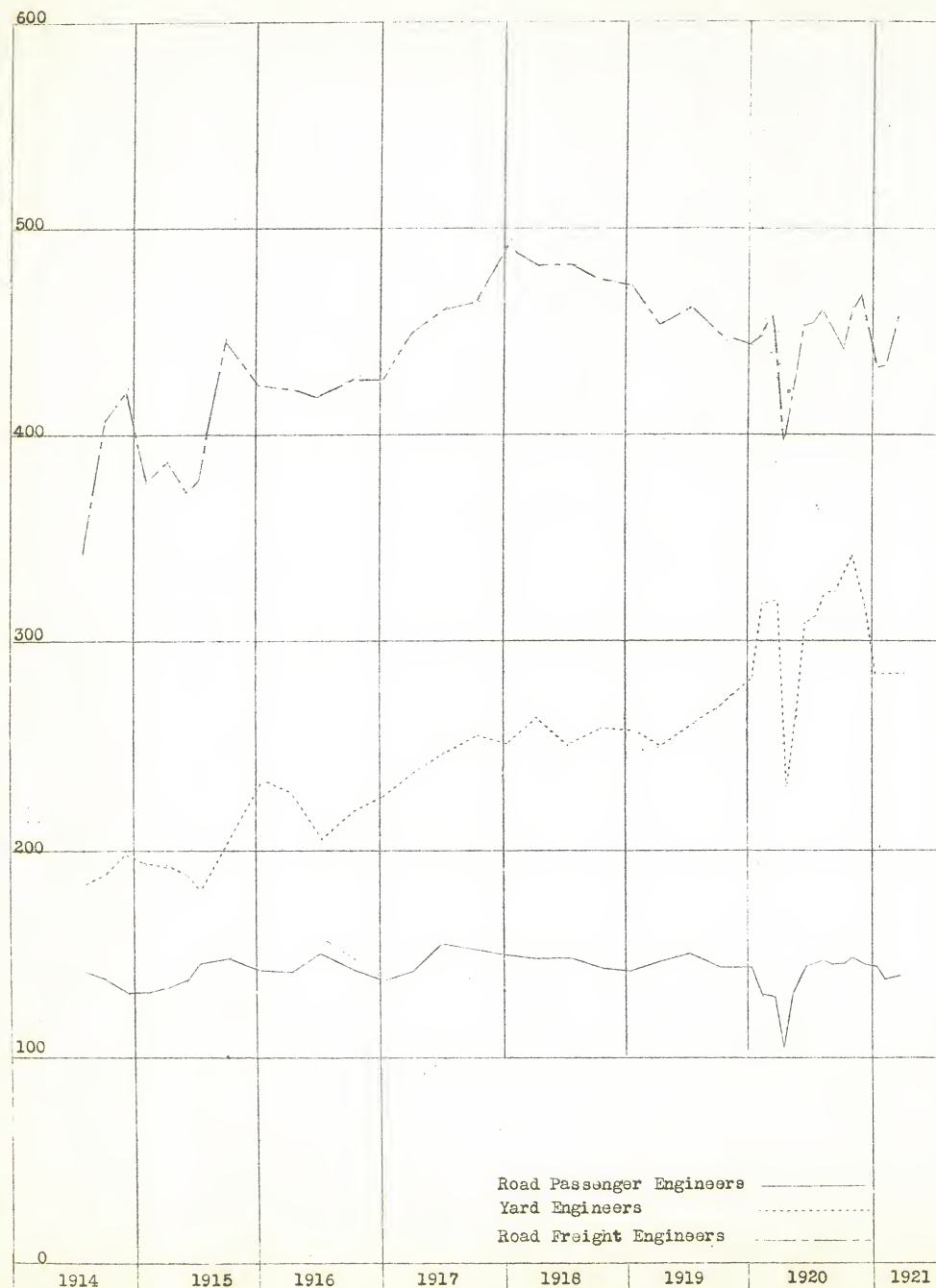
BALTIMORE AND OHIO



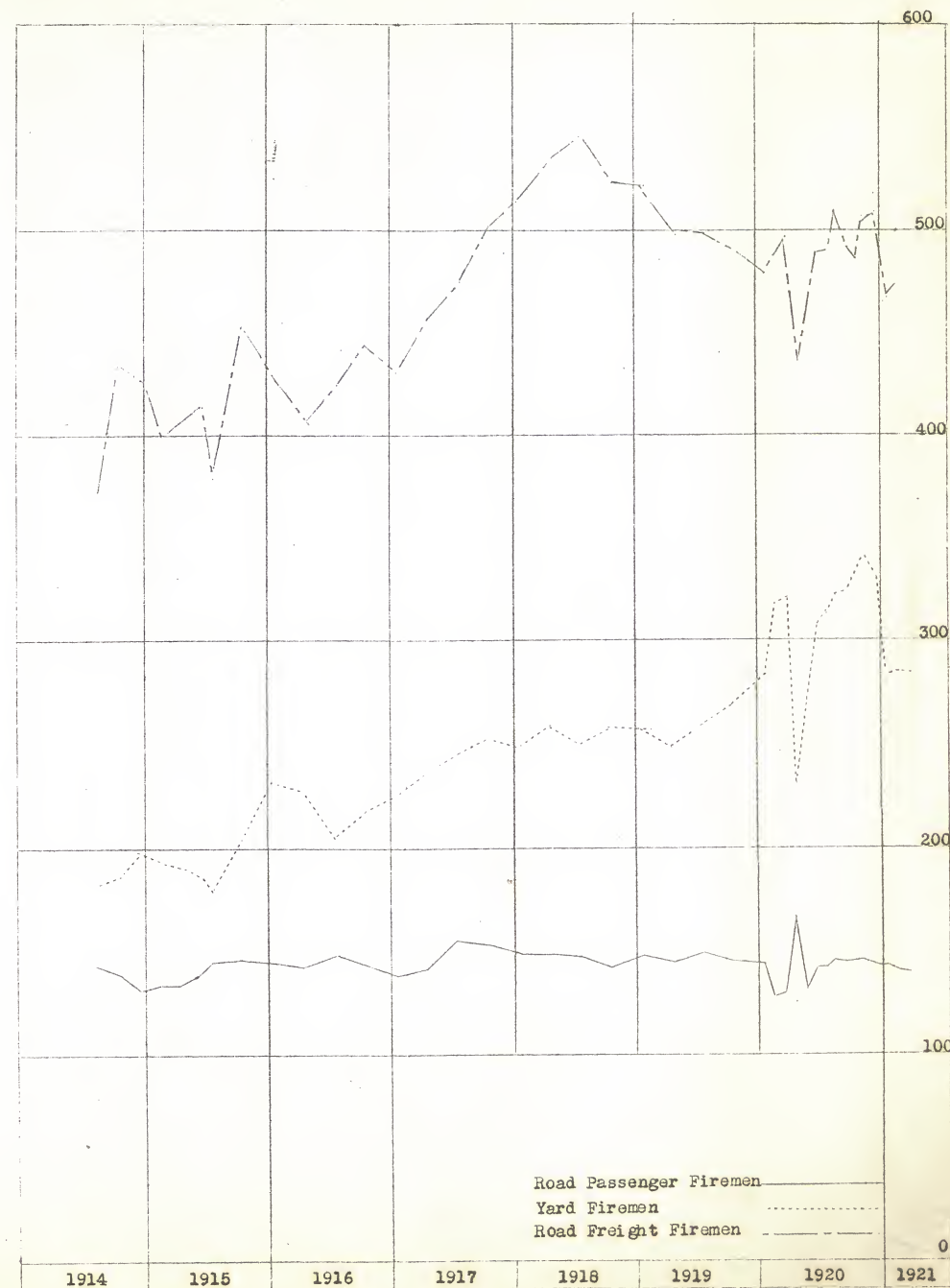
BALTIMORE AND OHIO



DELAWARE, LACKAWANNA & WESTERN



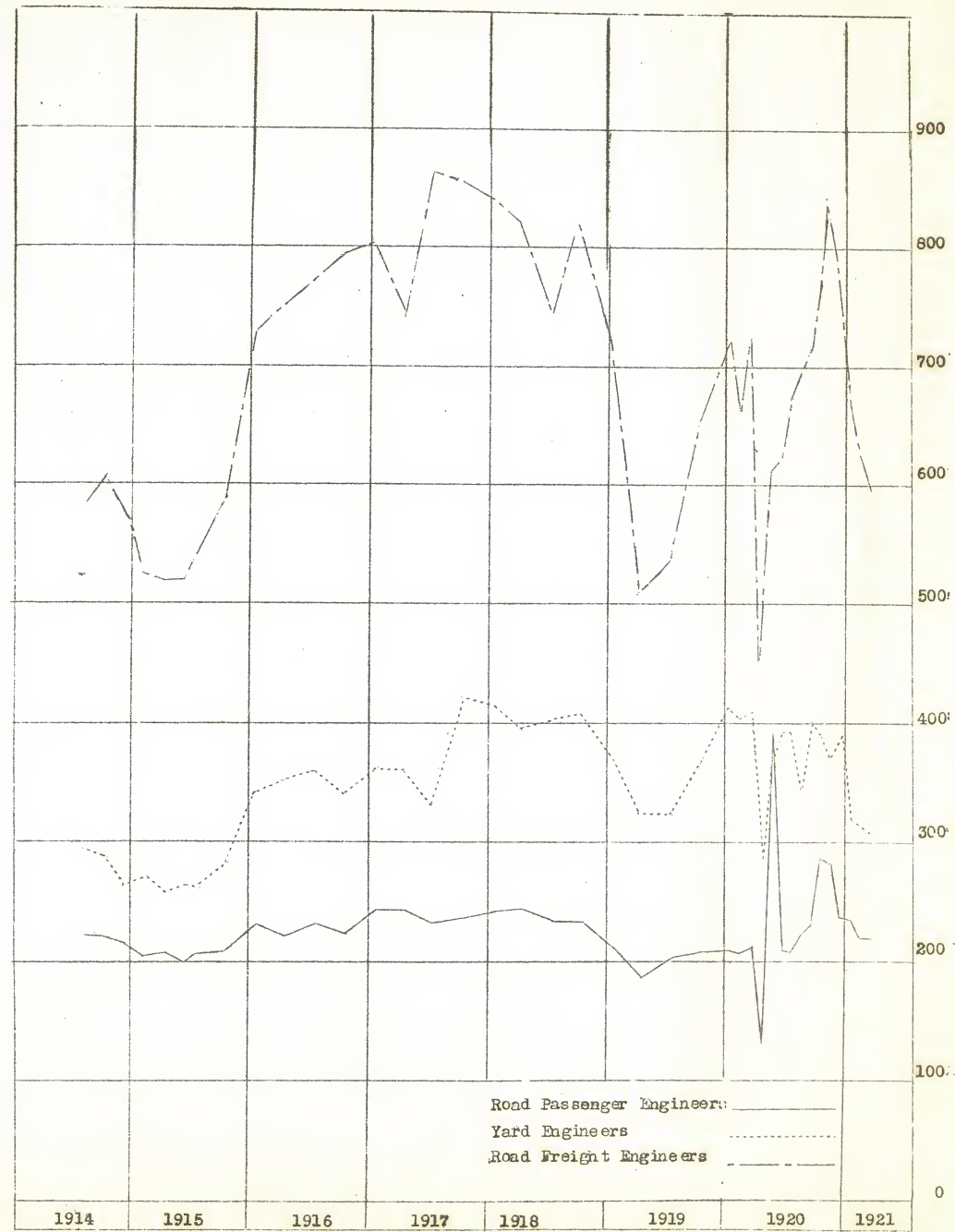
DELAWARE, LACKAWANNA & WESTERN



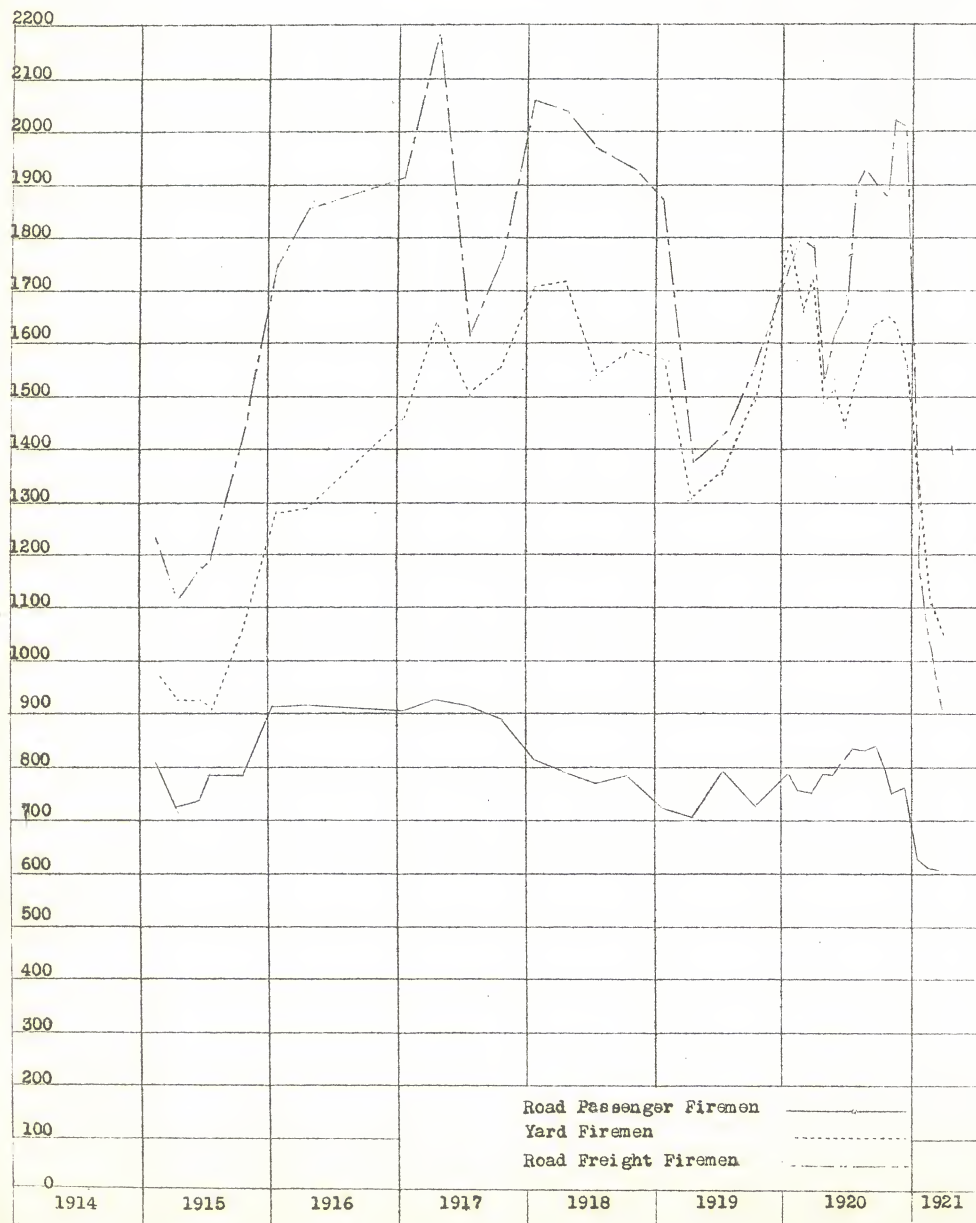
ERIE RAILROAD



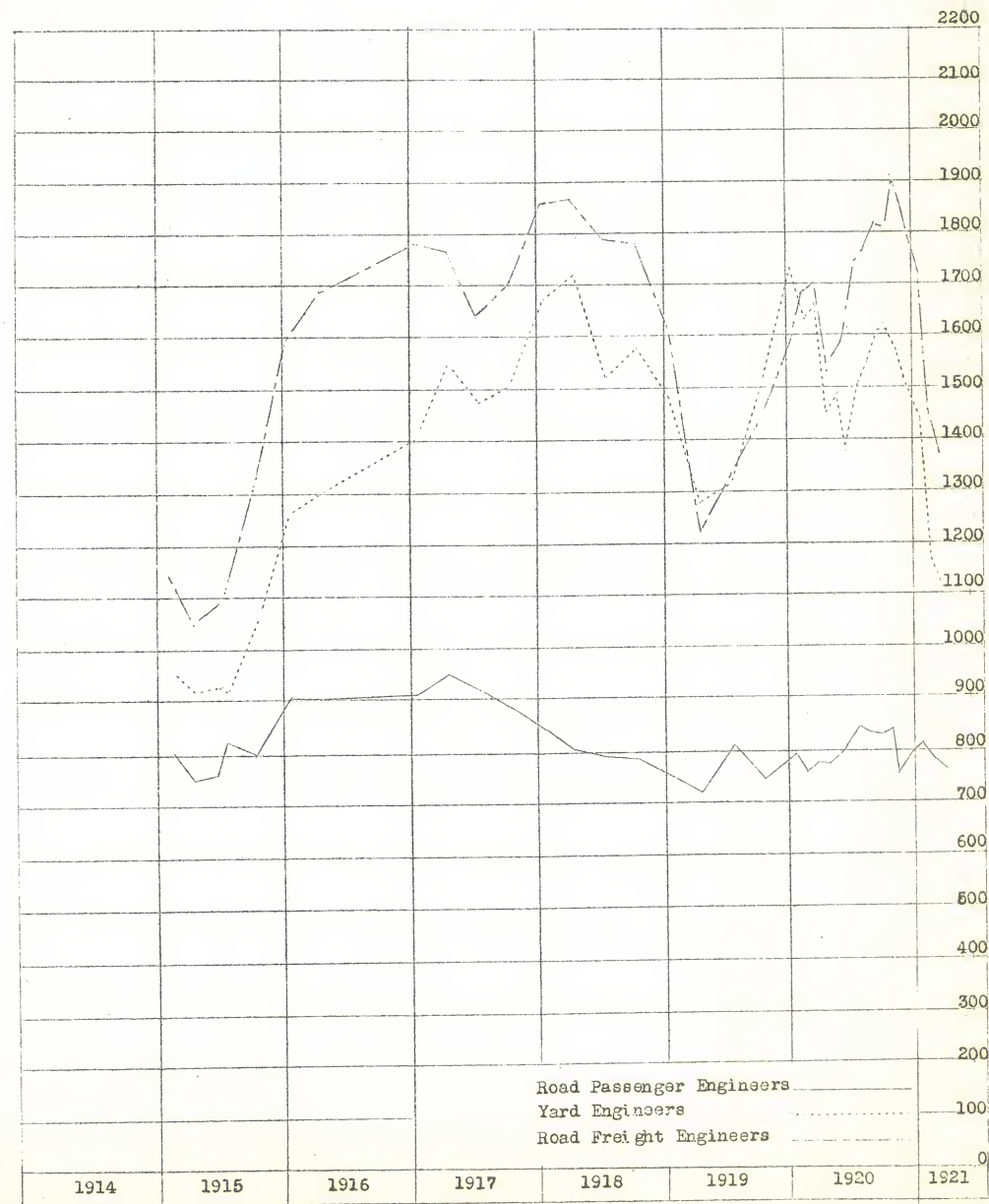
ERIE RAILROAD



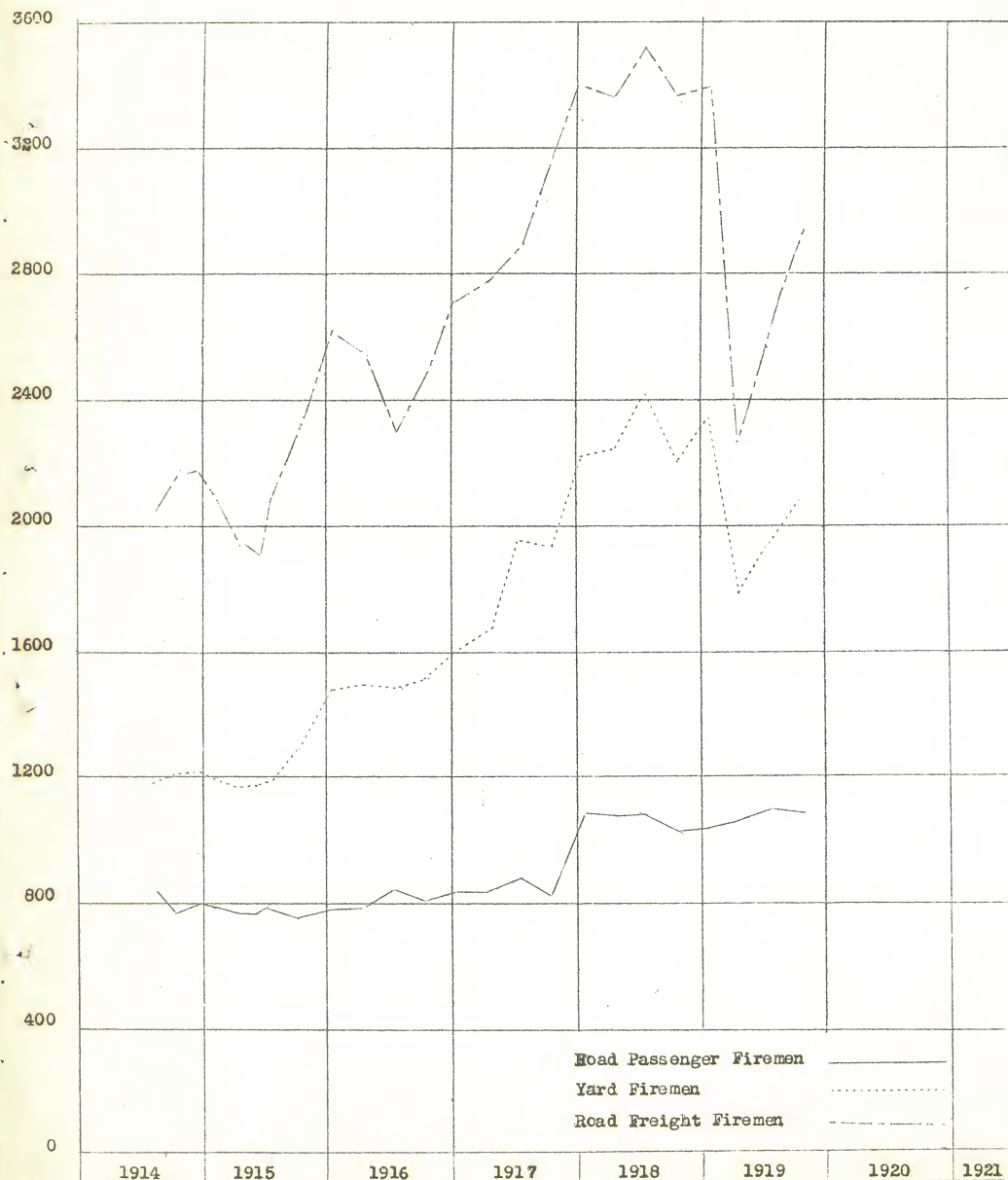
NEW YORK CENTRAL



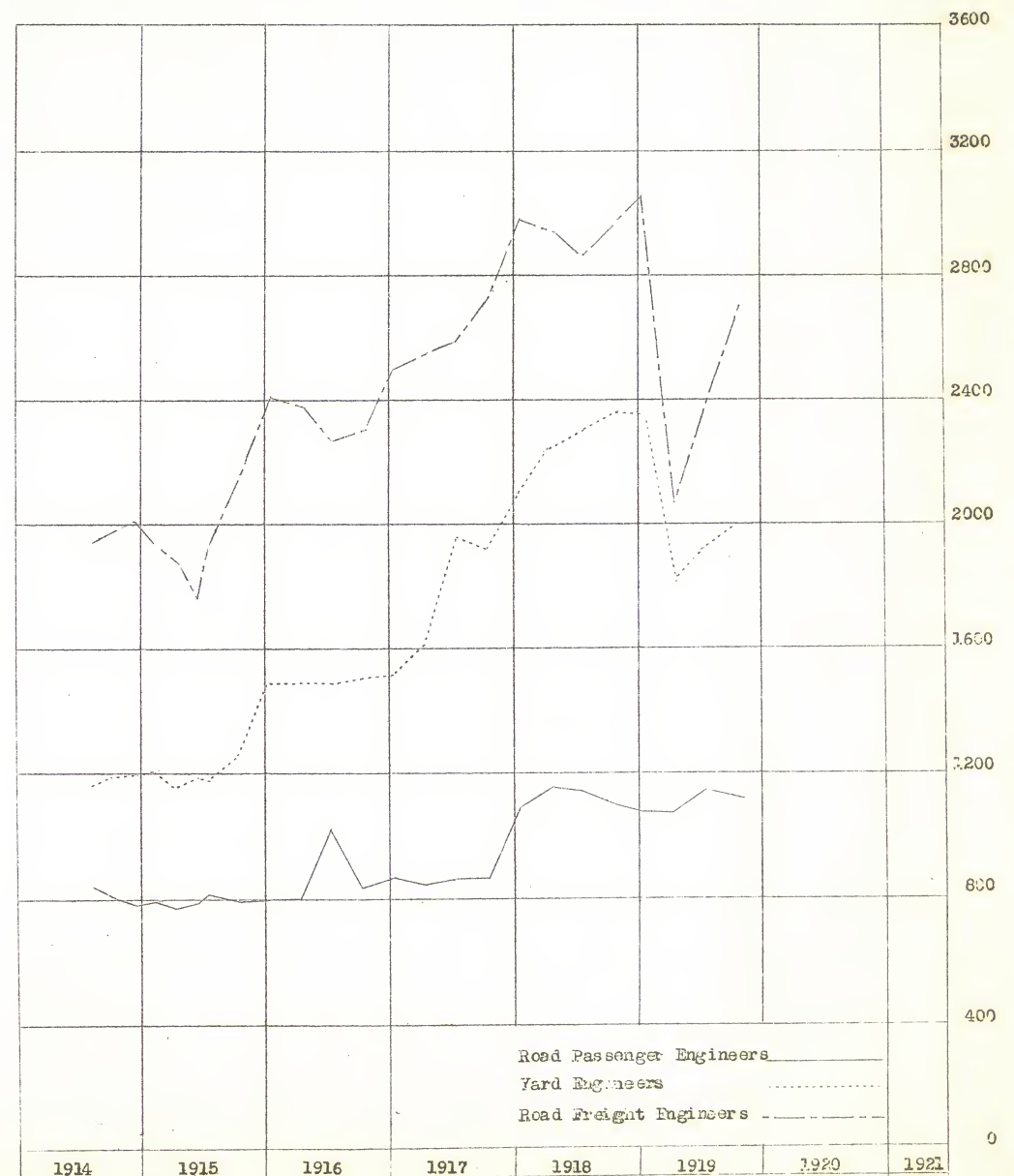
NEW YORK CENTRAL



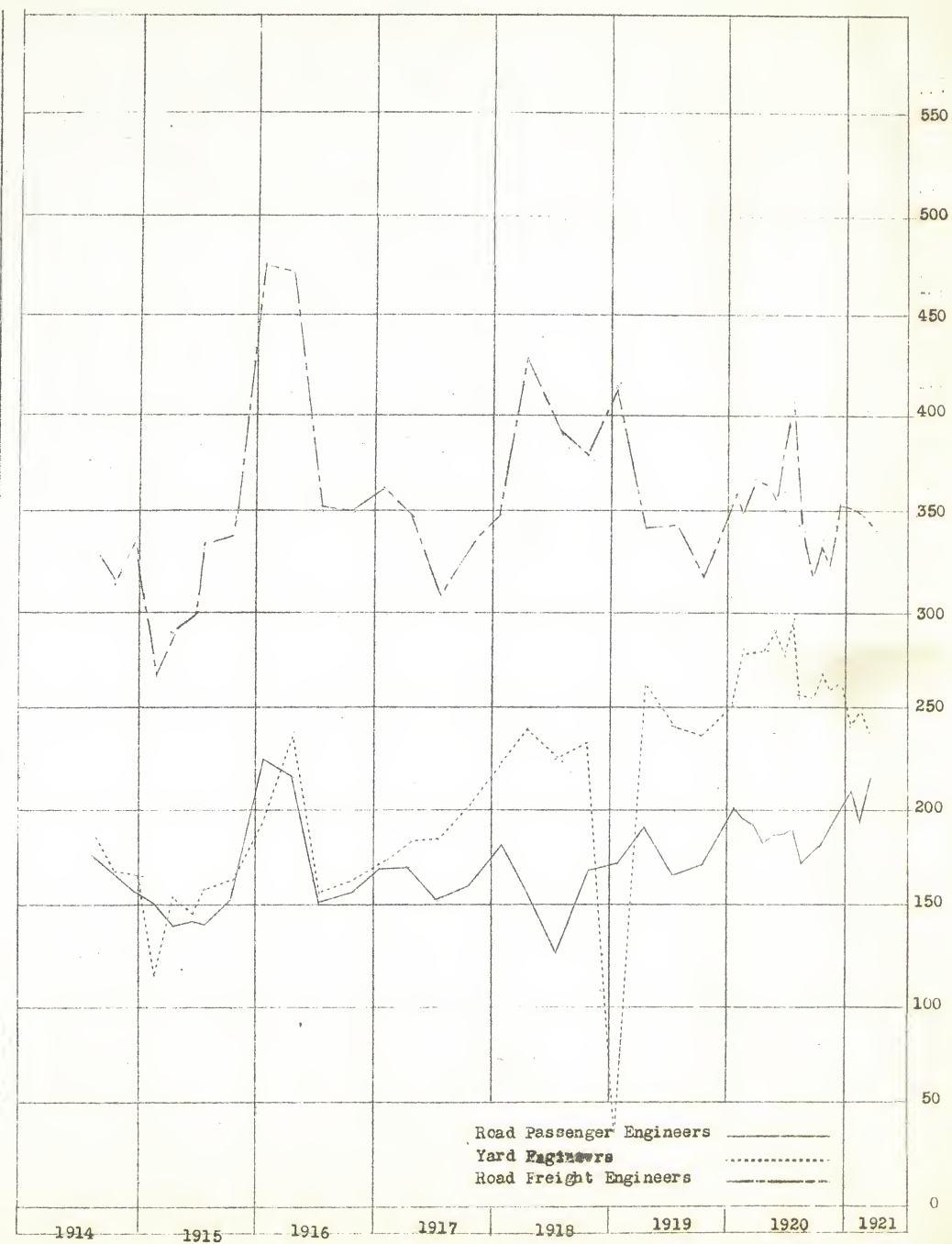
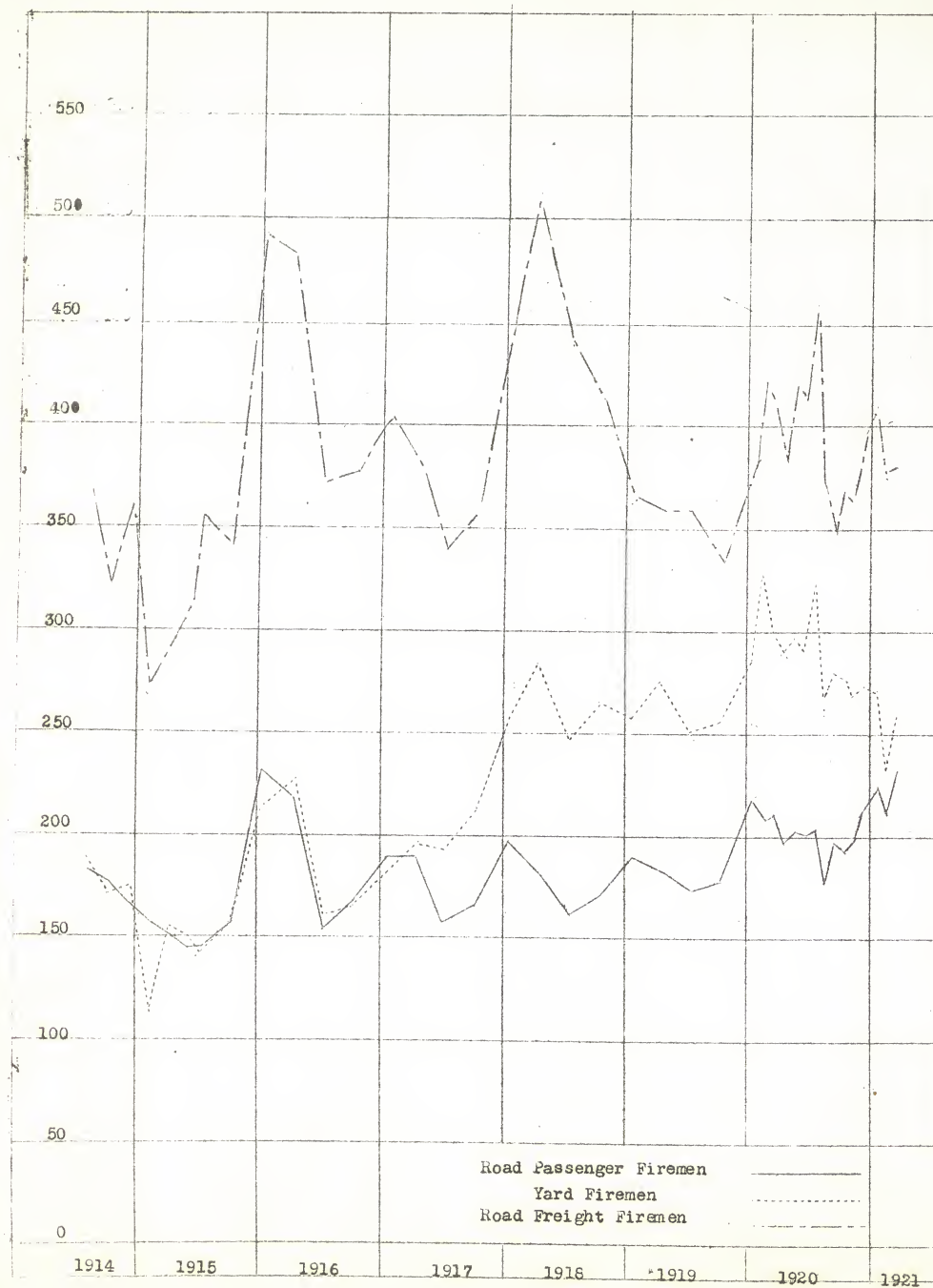
PENNSYLVANIA RAILROAD



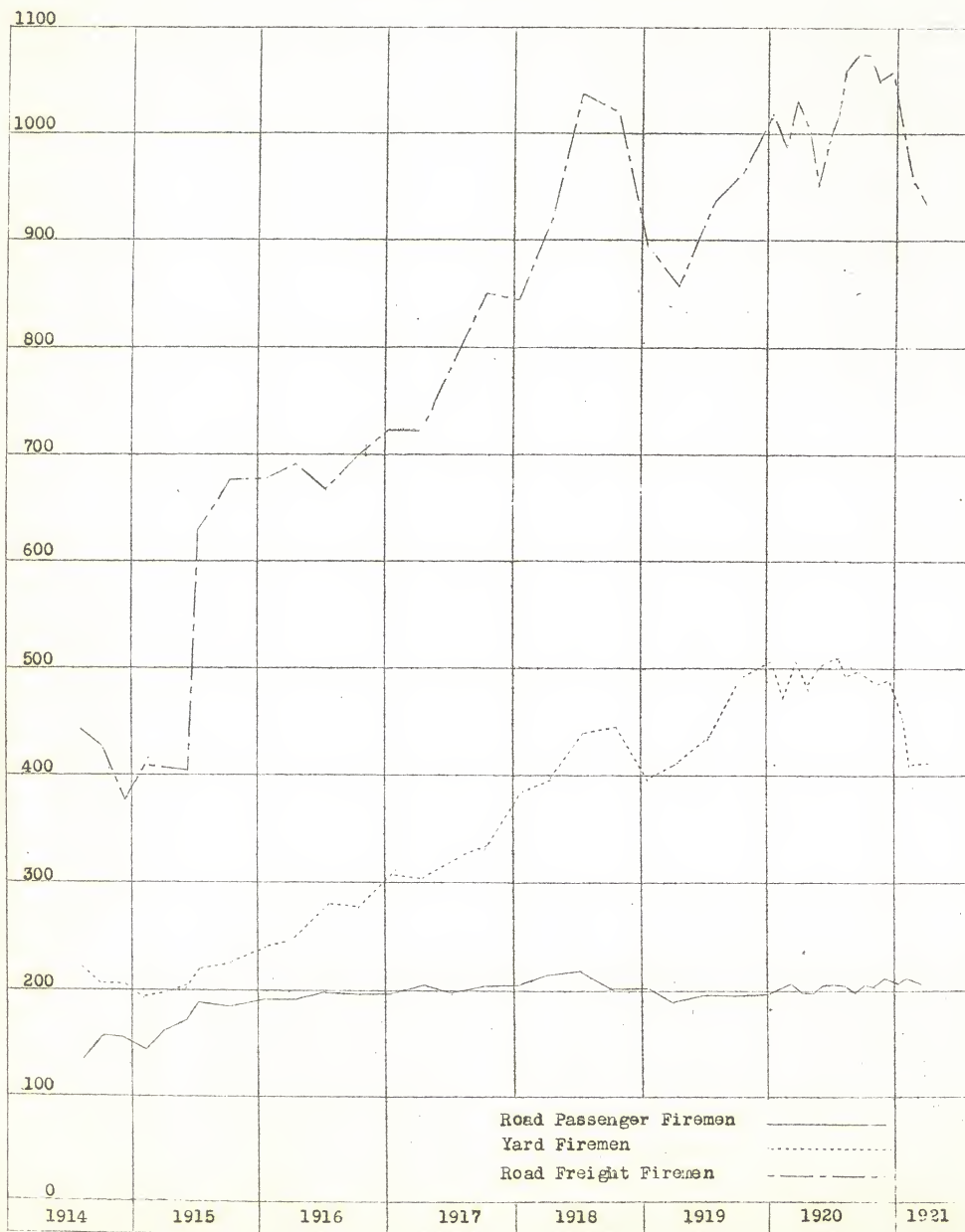
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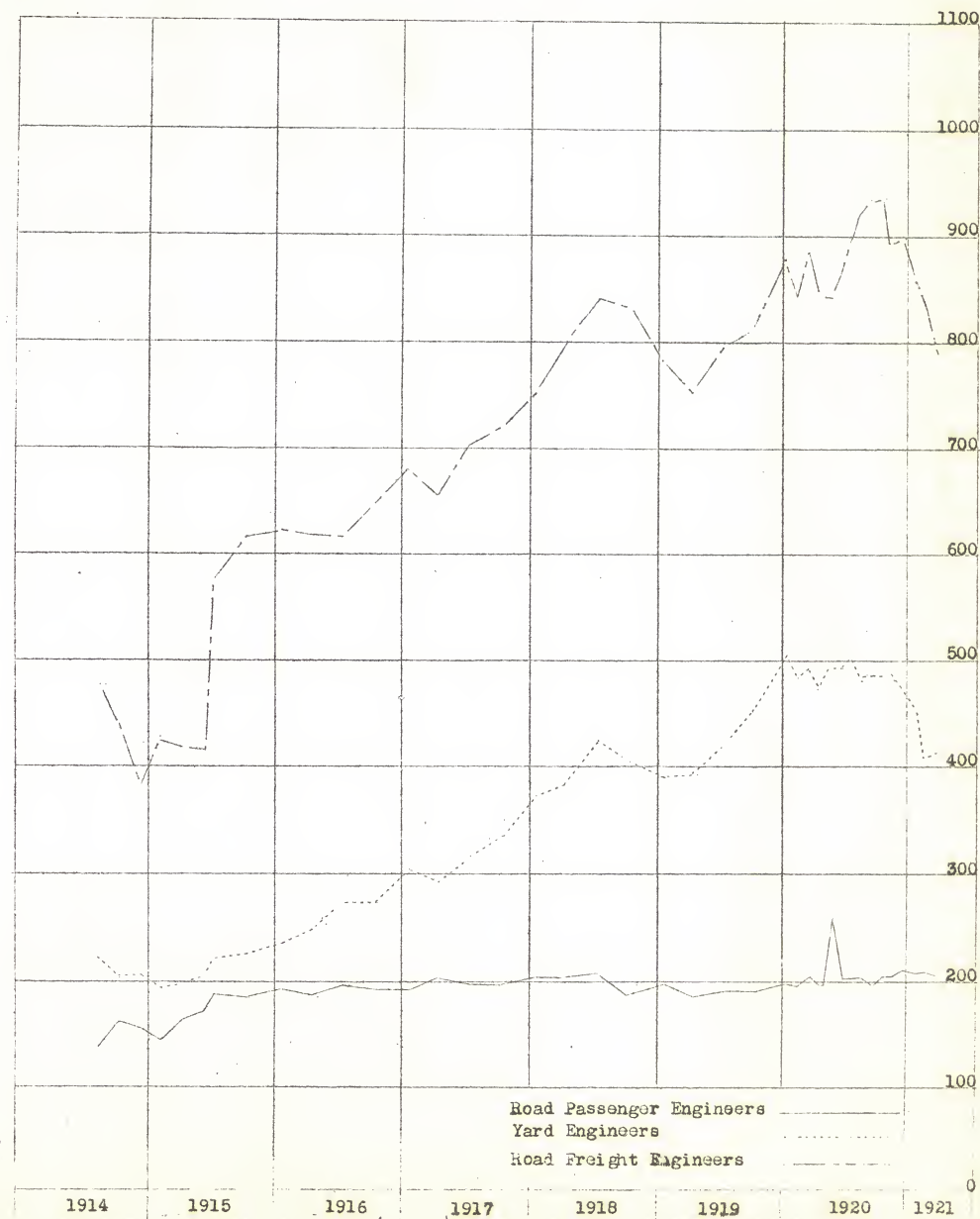
ATLANTIC COAST LINE.



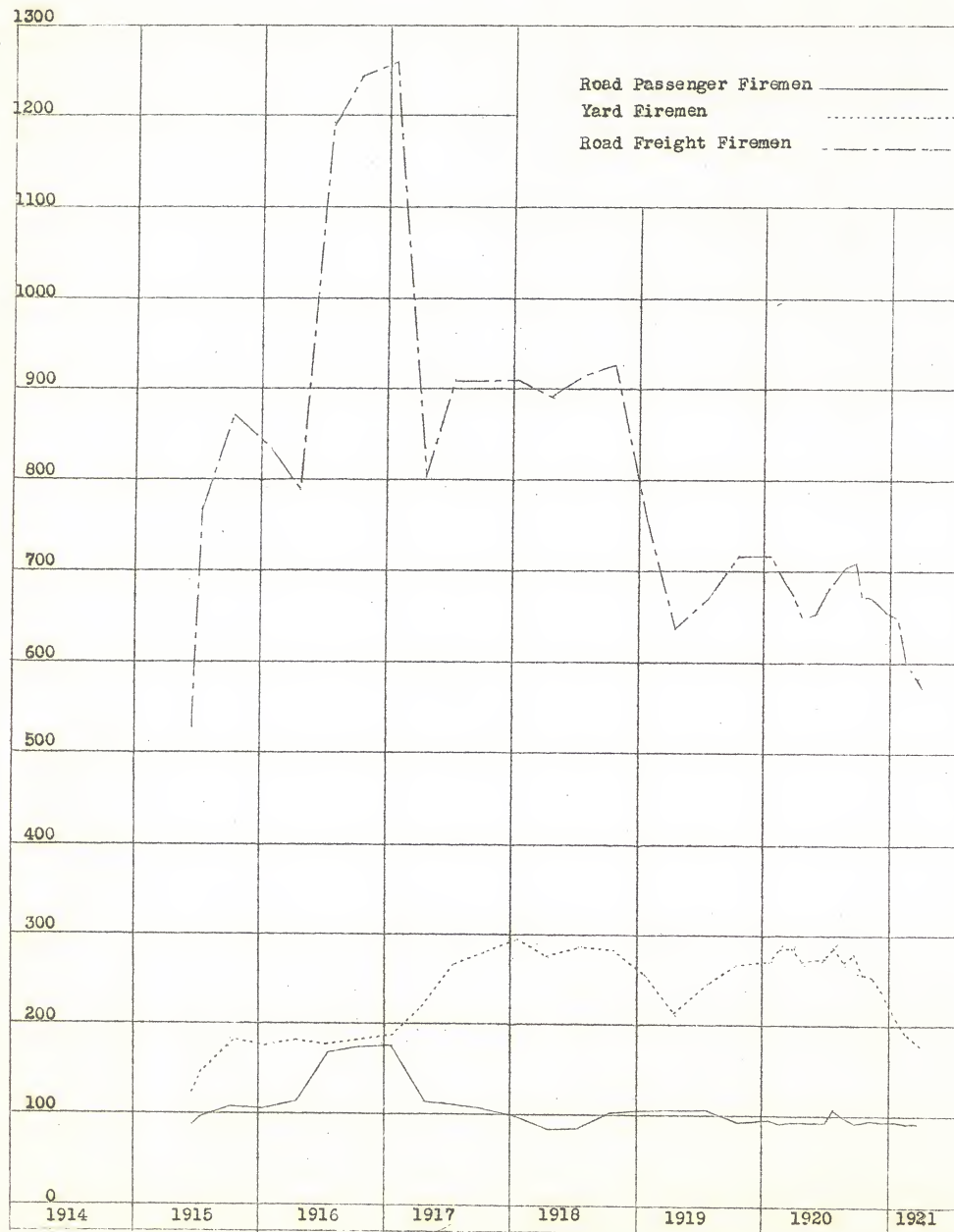
LOUISVILLE AND NASHVILLE



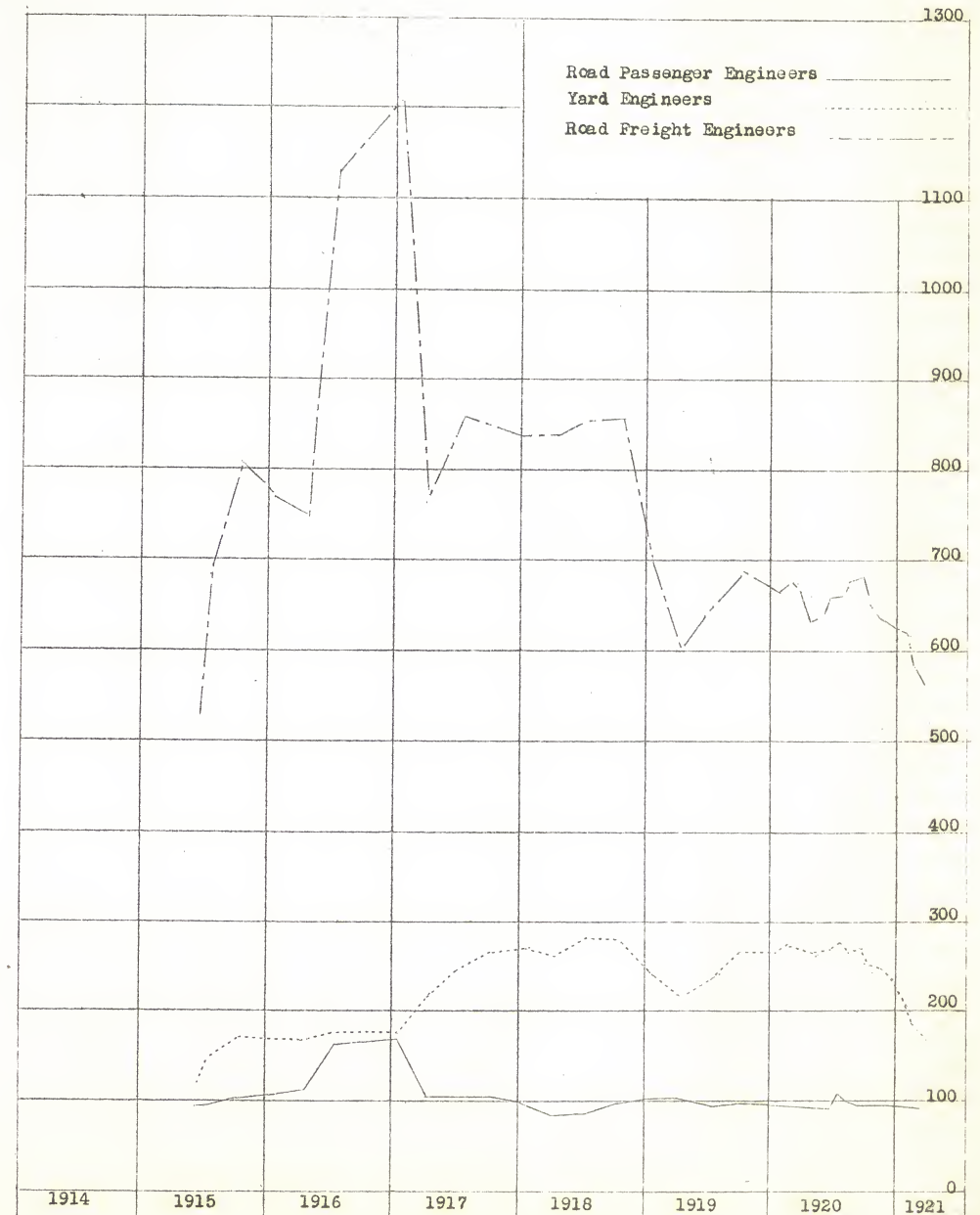
LOUISVILLE AND NASHVILLE



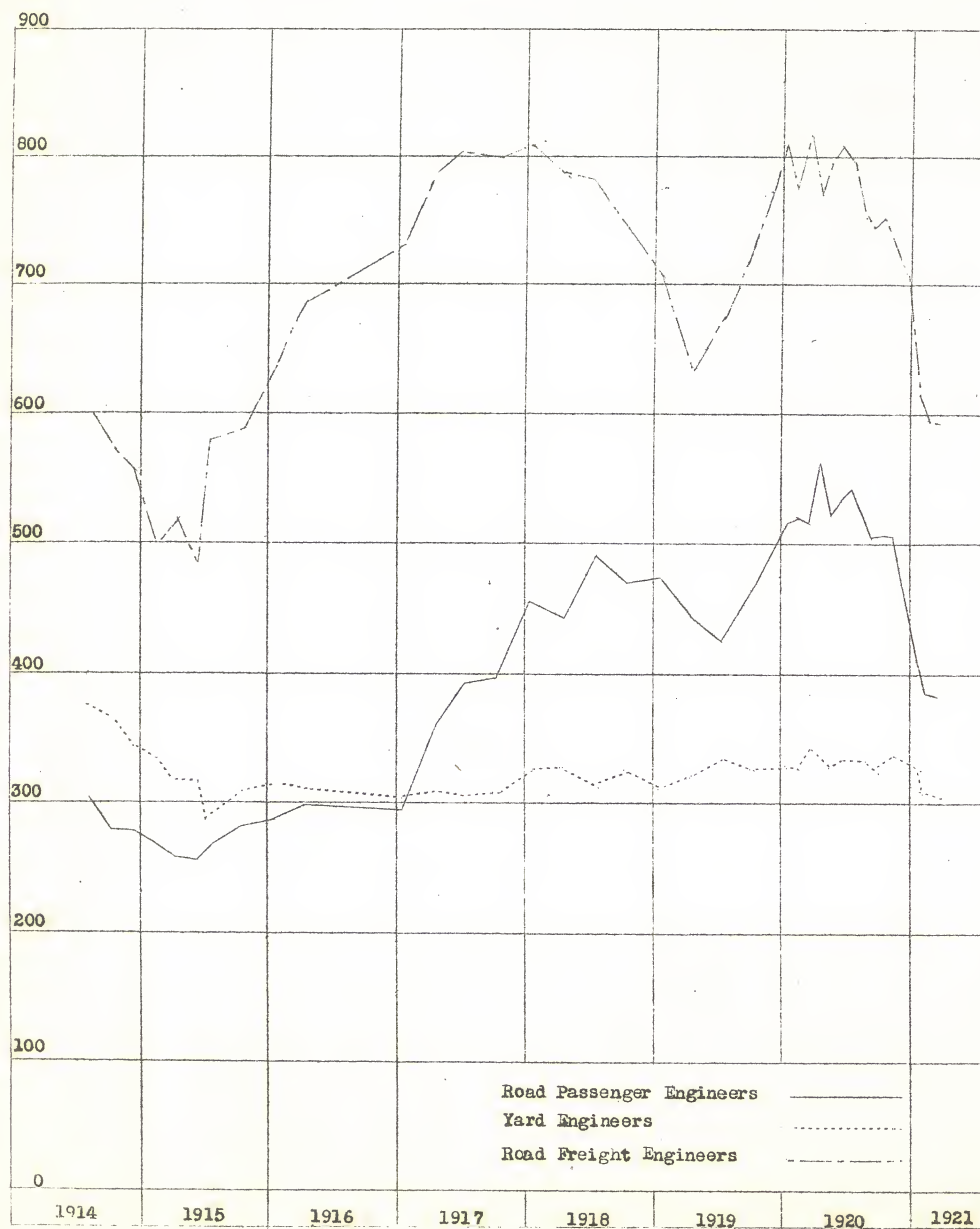
NORFOLK & WESTERN



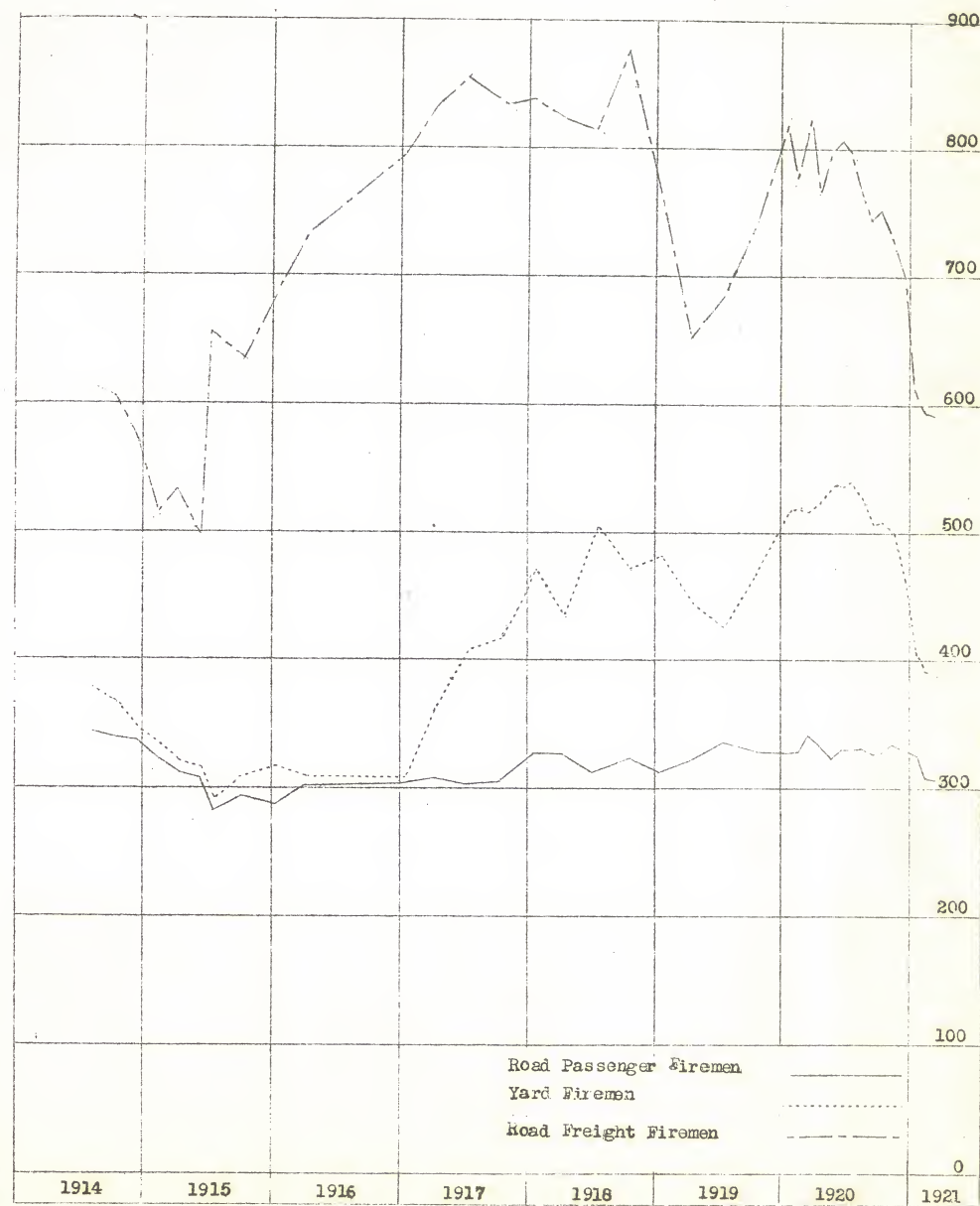
NORFOLK & WESTERN



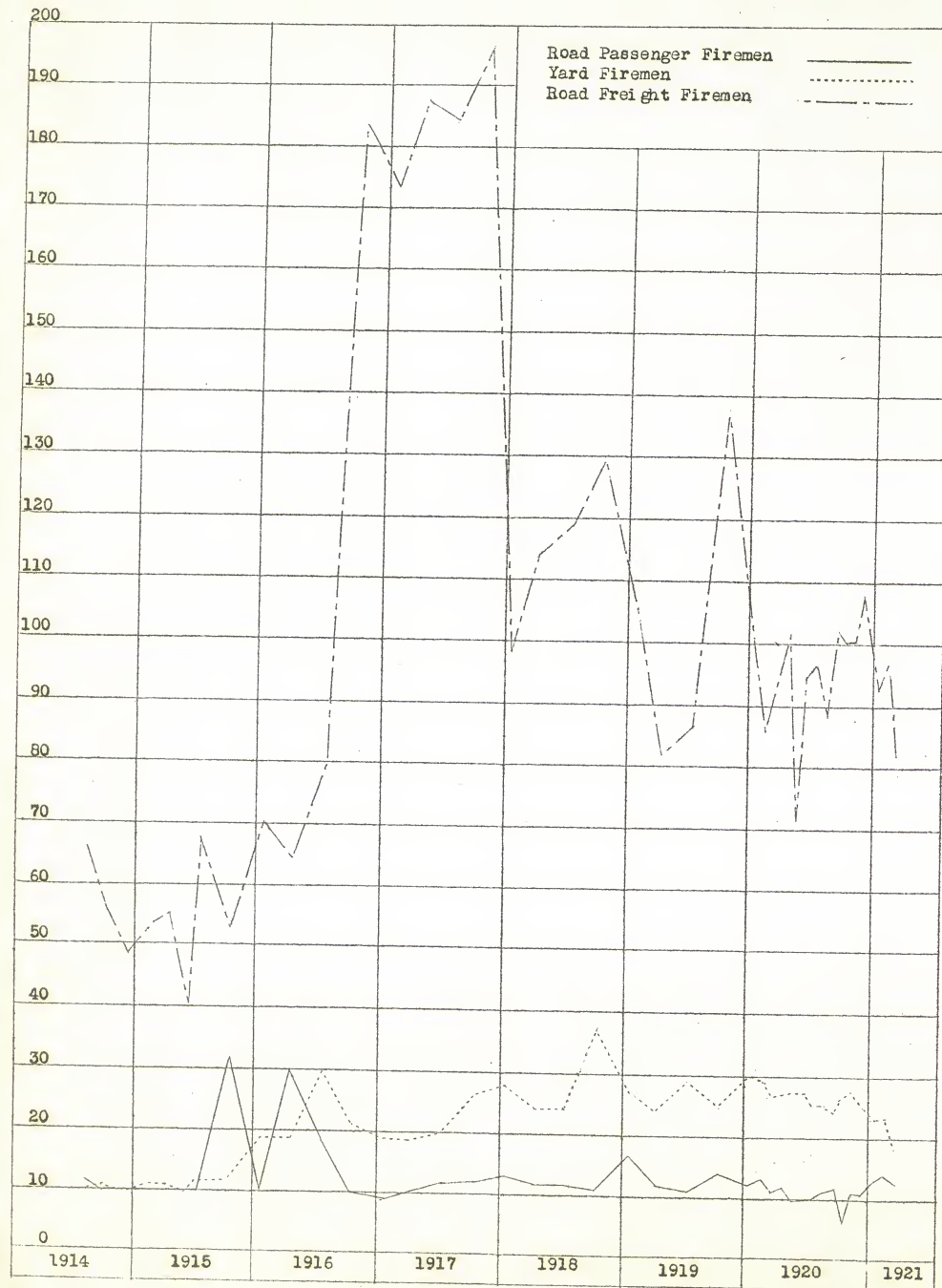
SOUTHERN RAILWAY



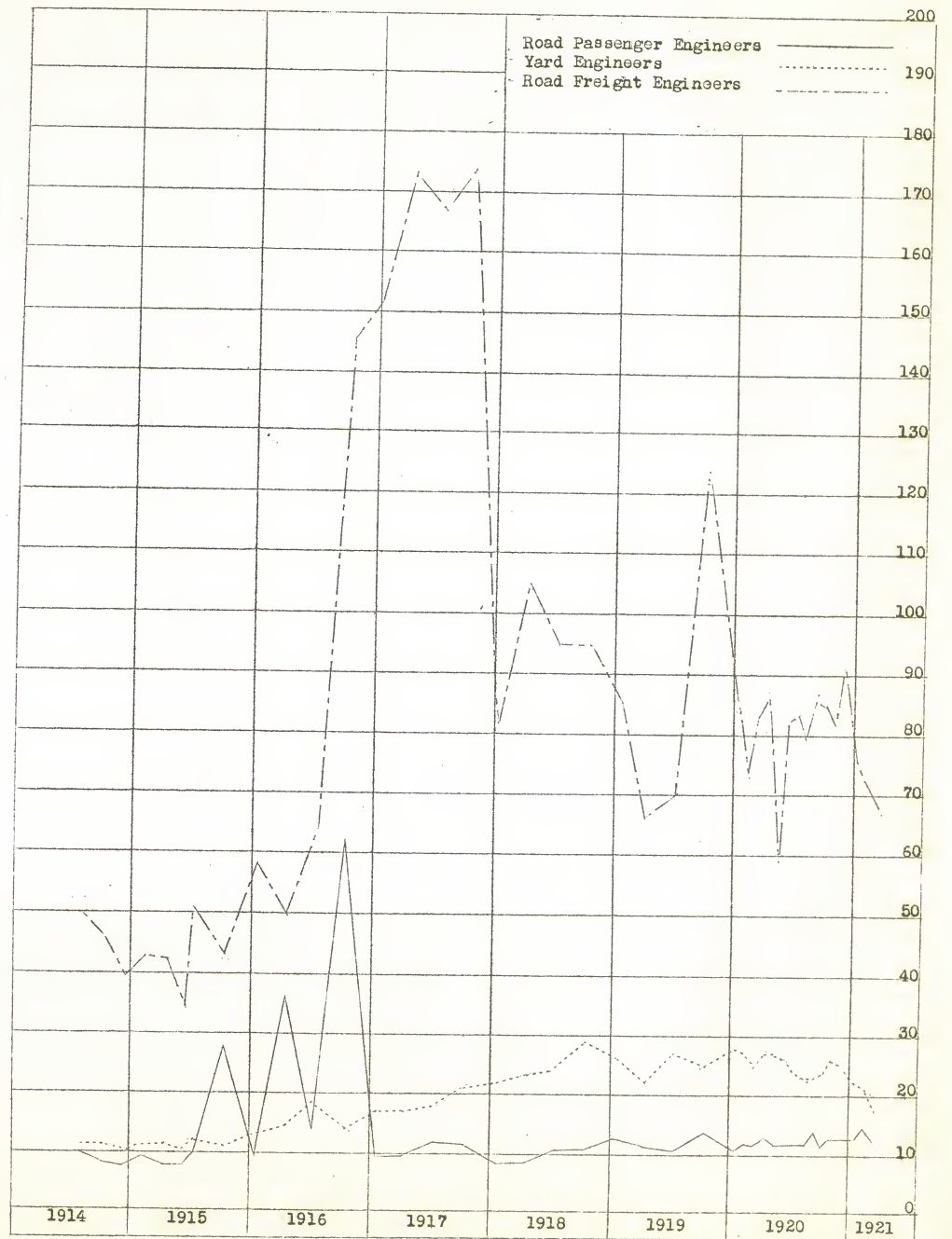
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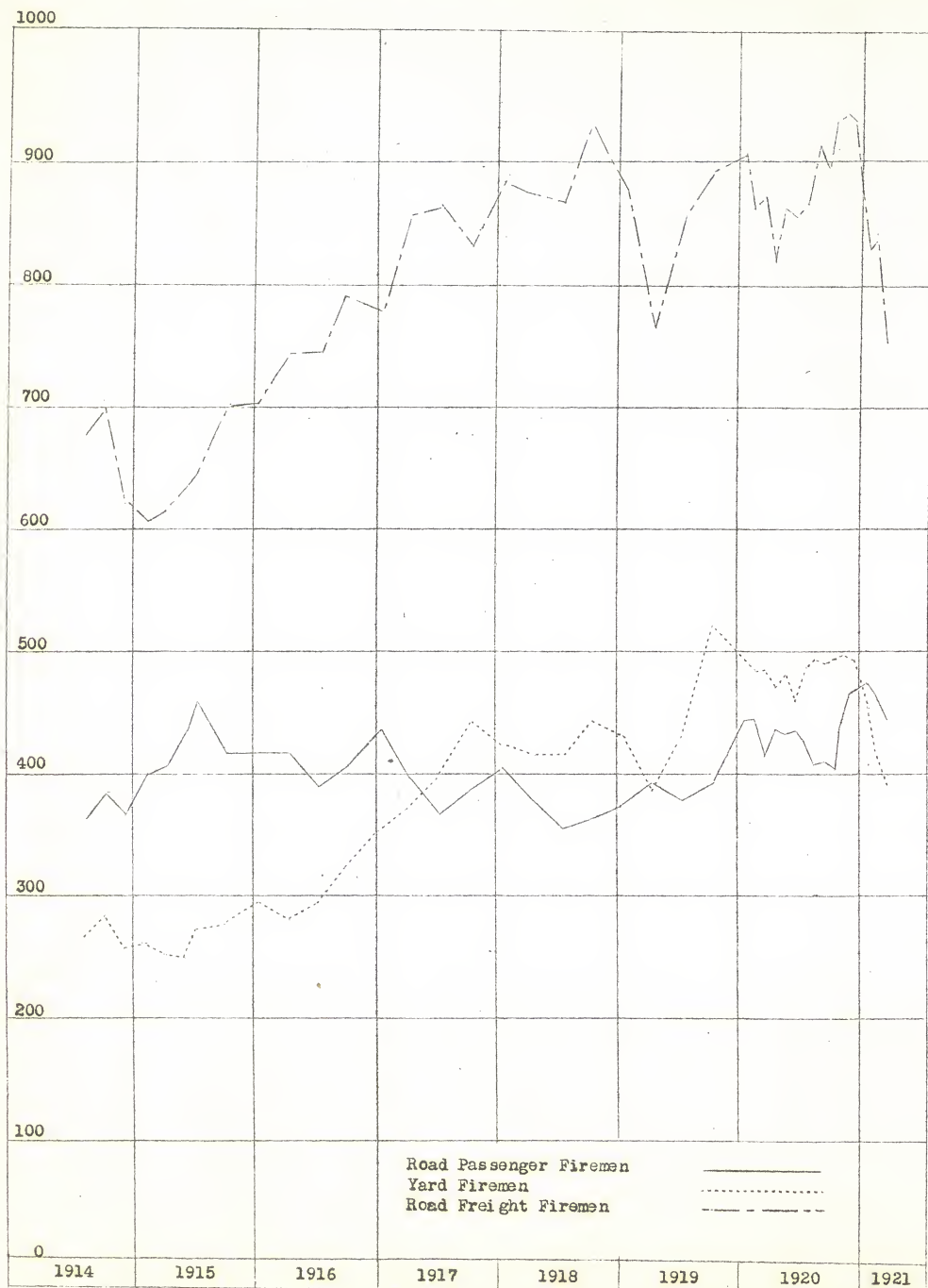
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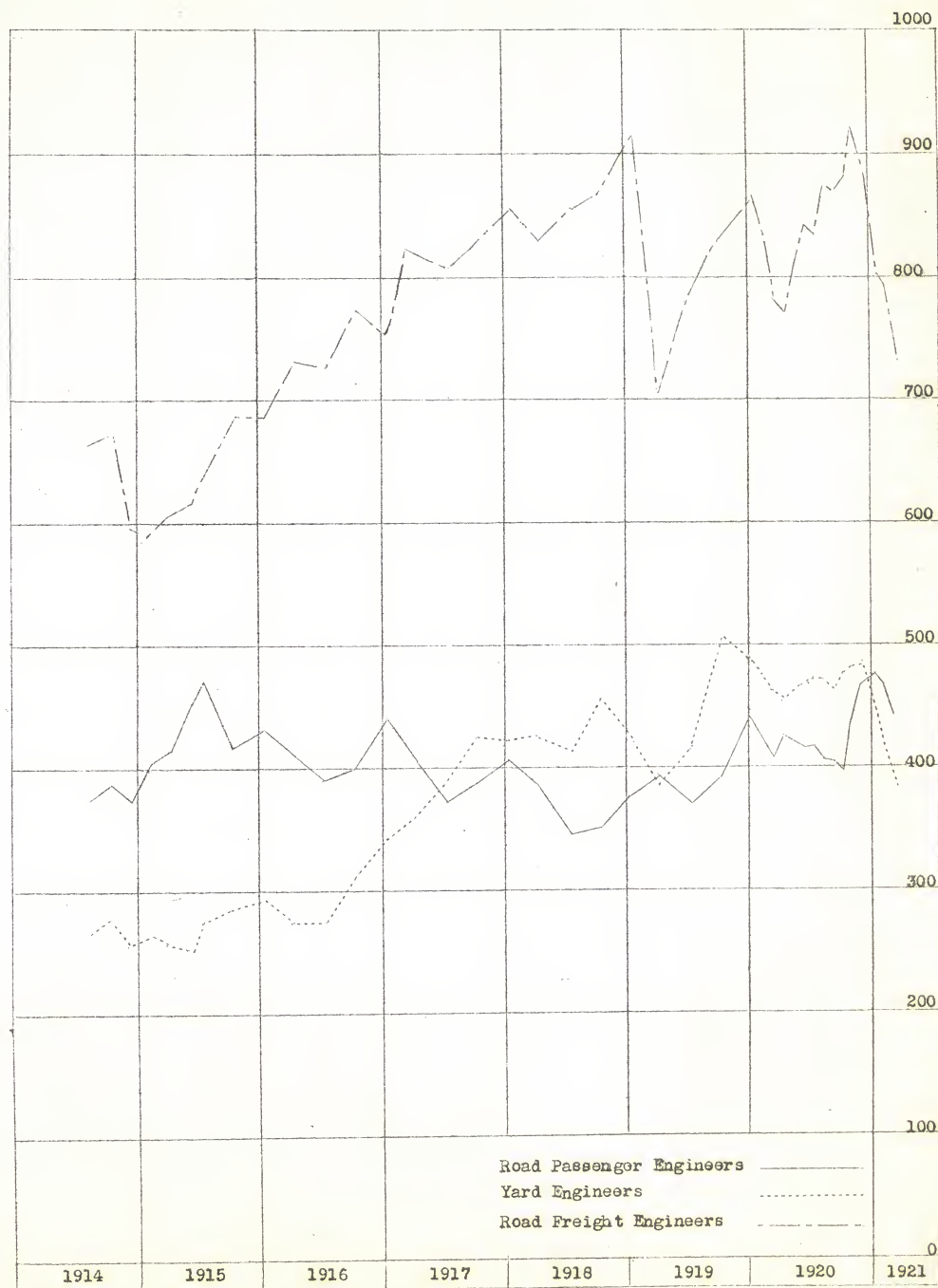
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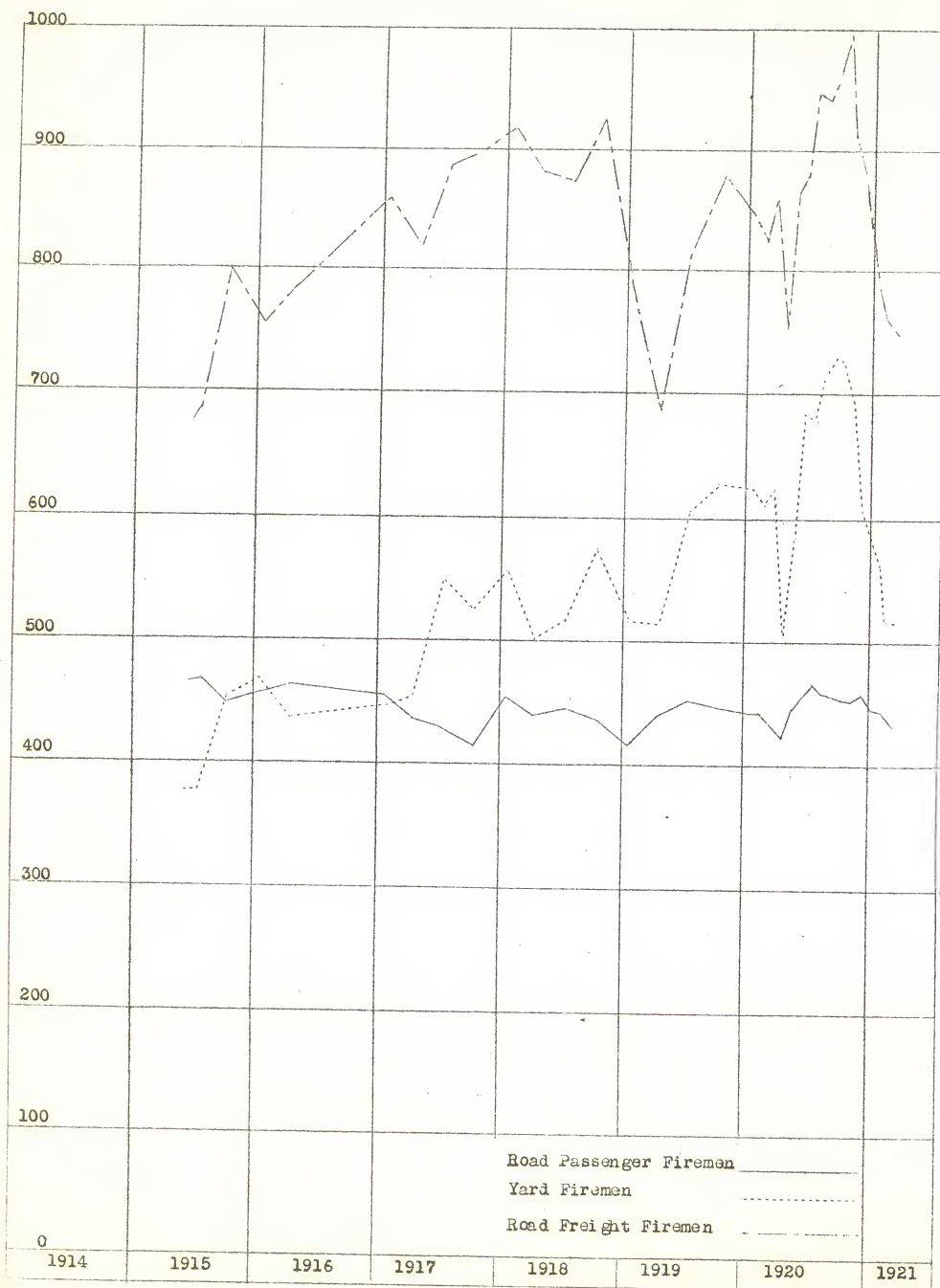
ATCHISON, TOPEKA & SANTA FE



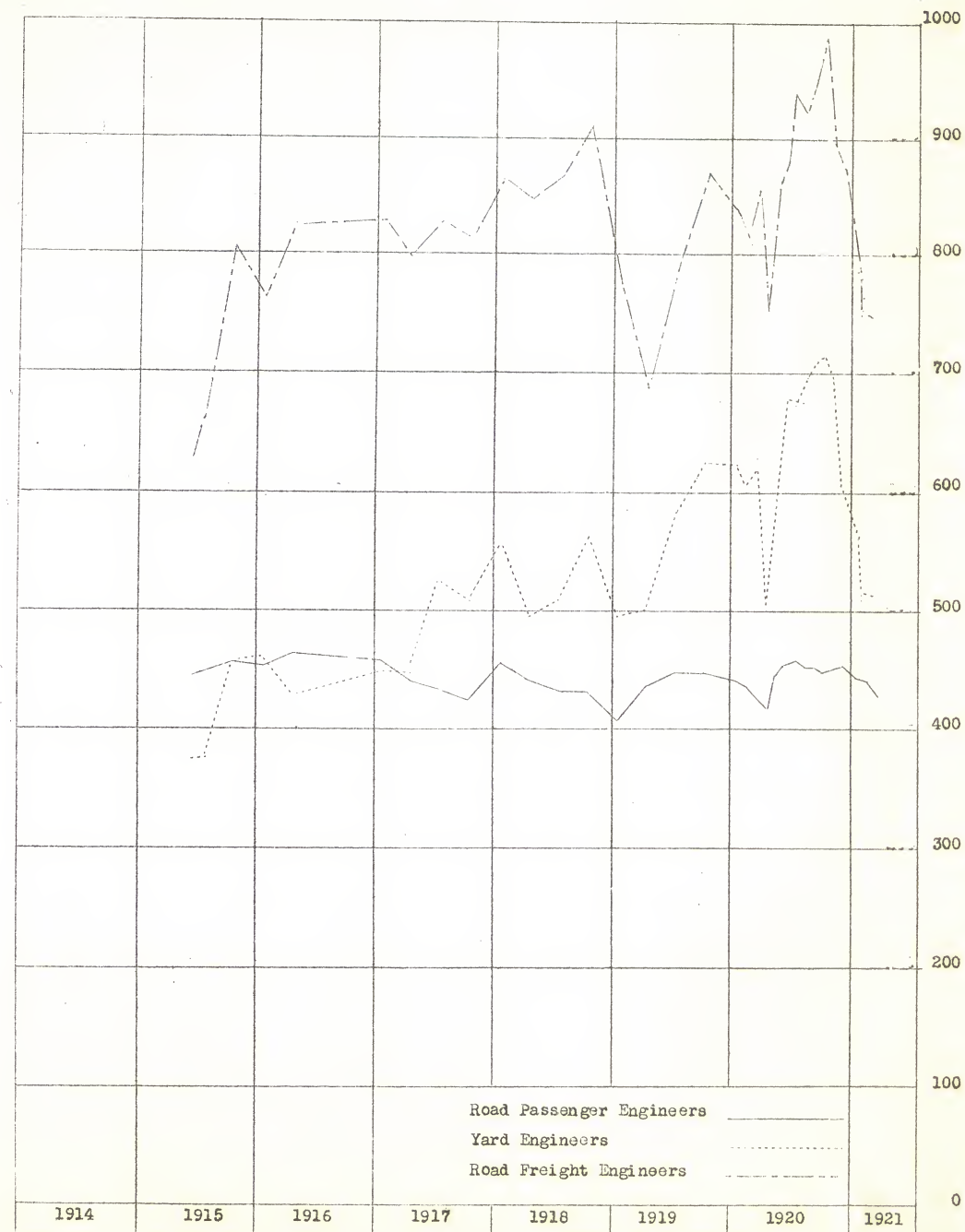
ATCHISON, TOPEKA & SANTA FE



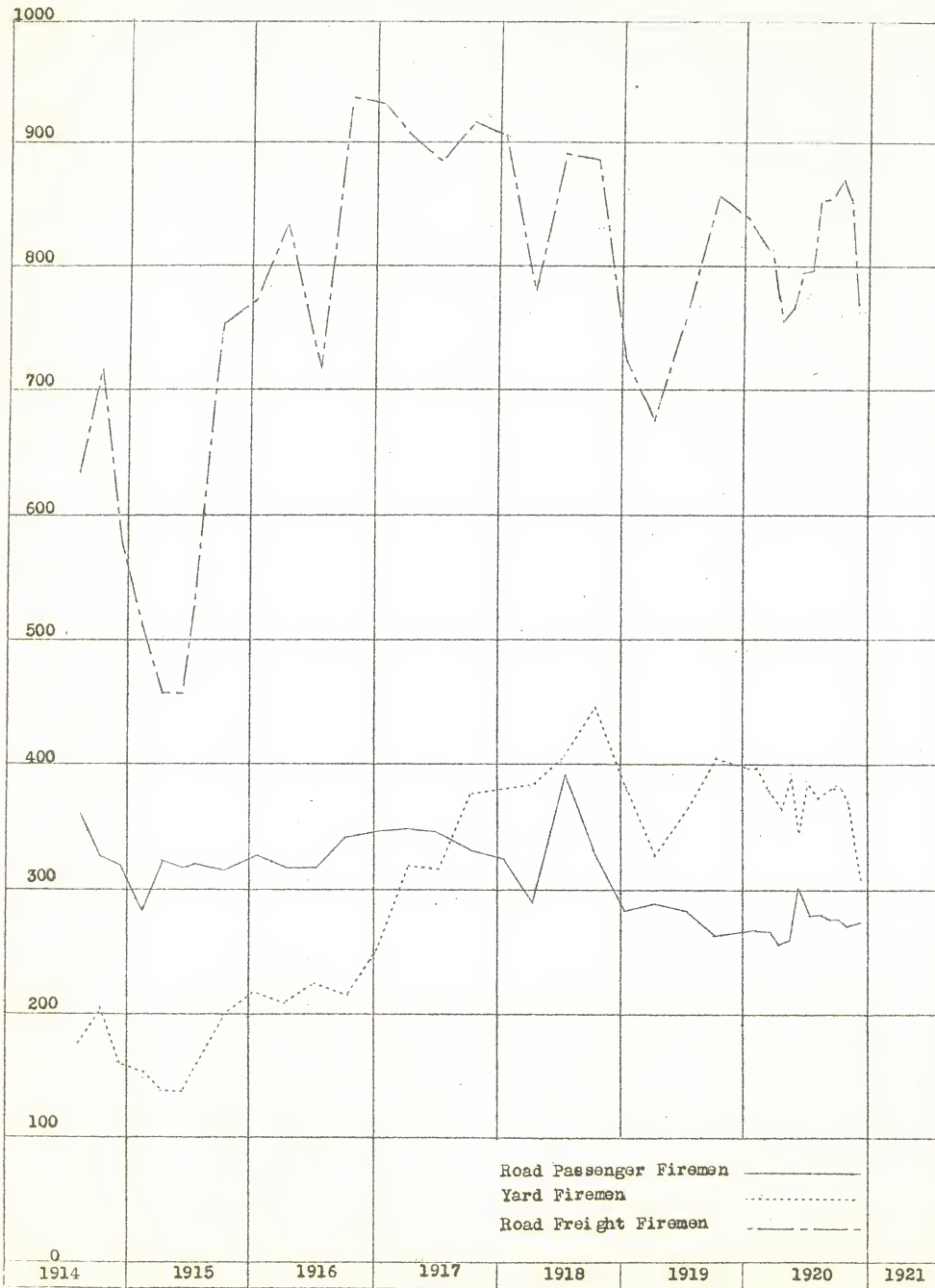
CHICAGO & NORTHWESTERN



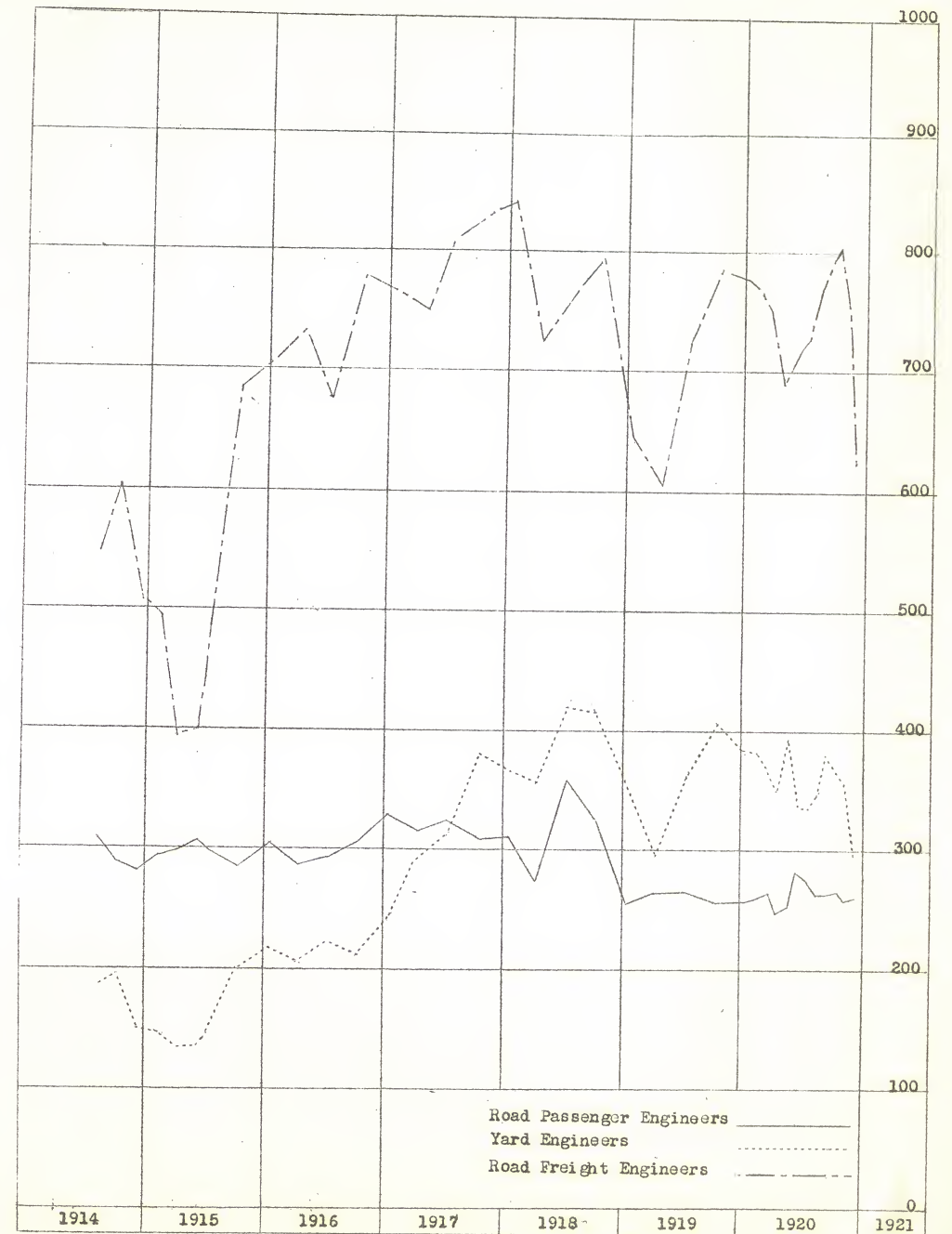
CHICAGO & NORTHWESTERN



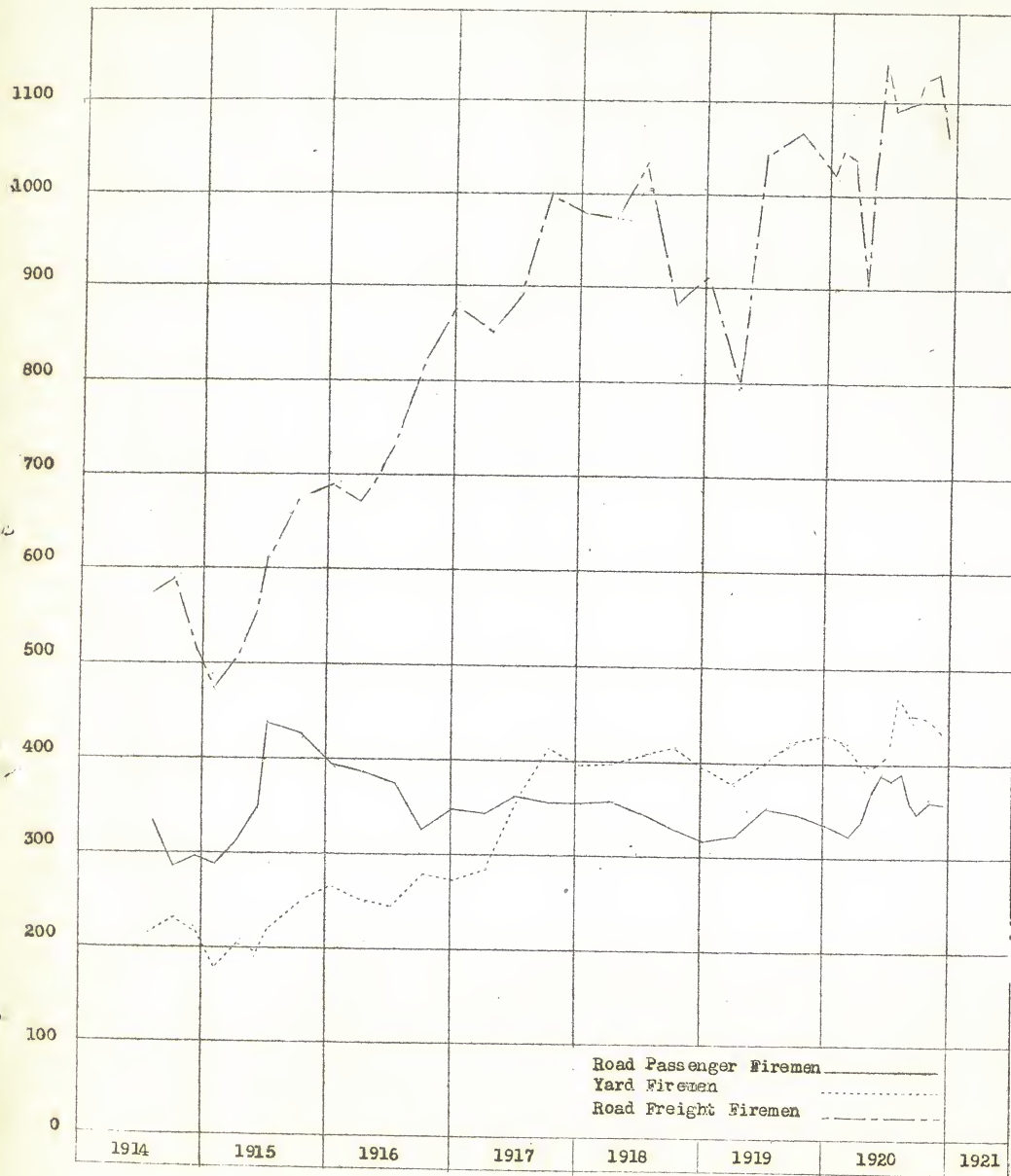
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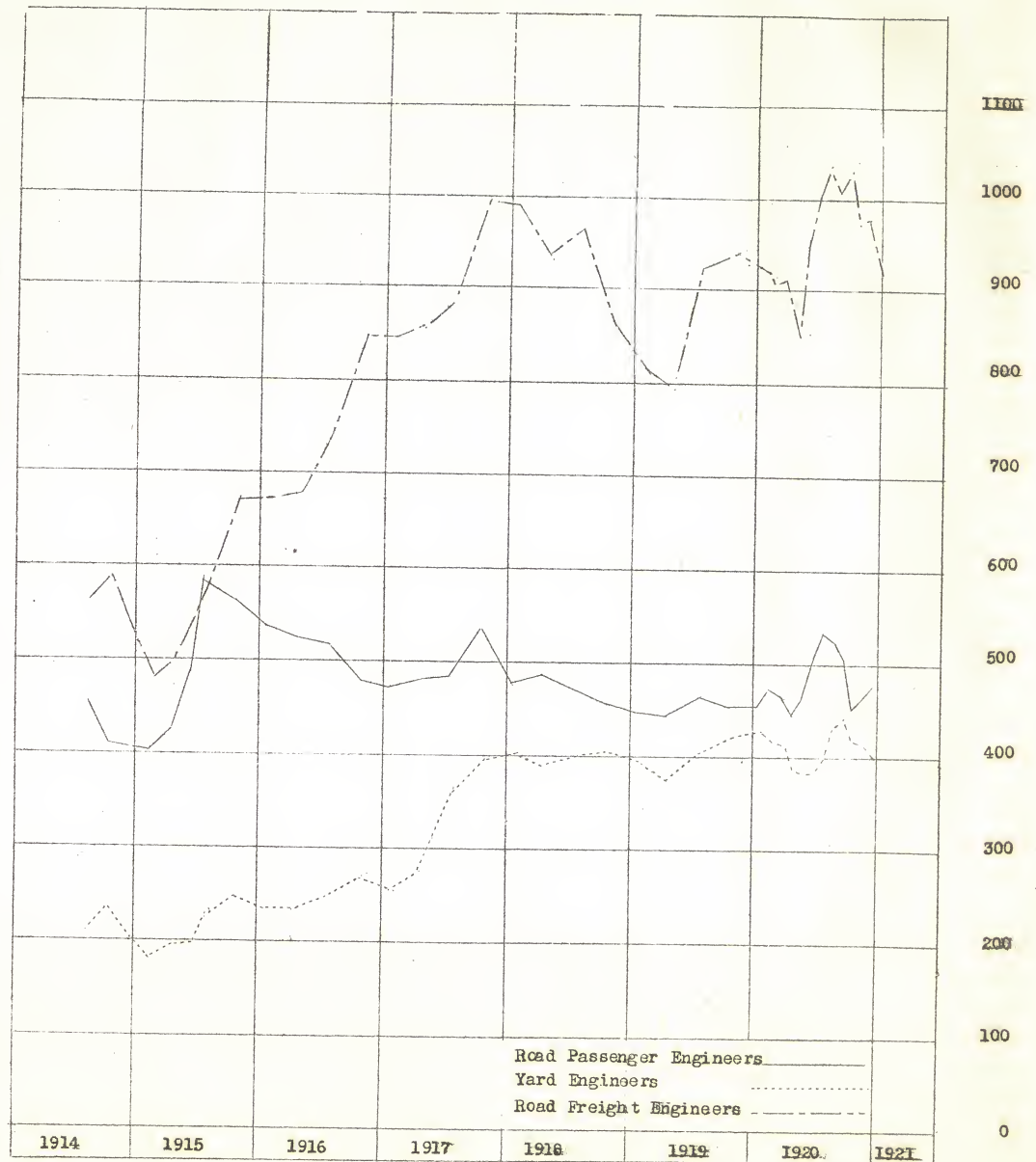
GREAT NORTHERN



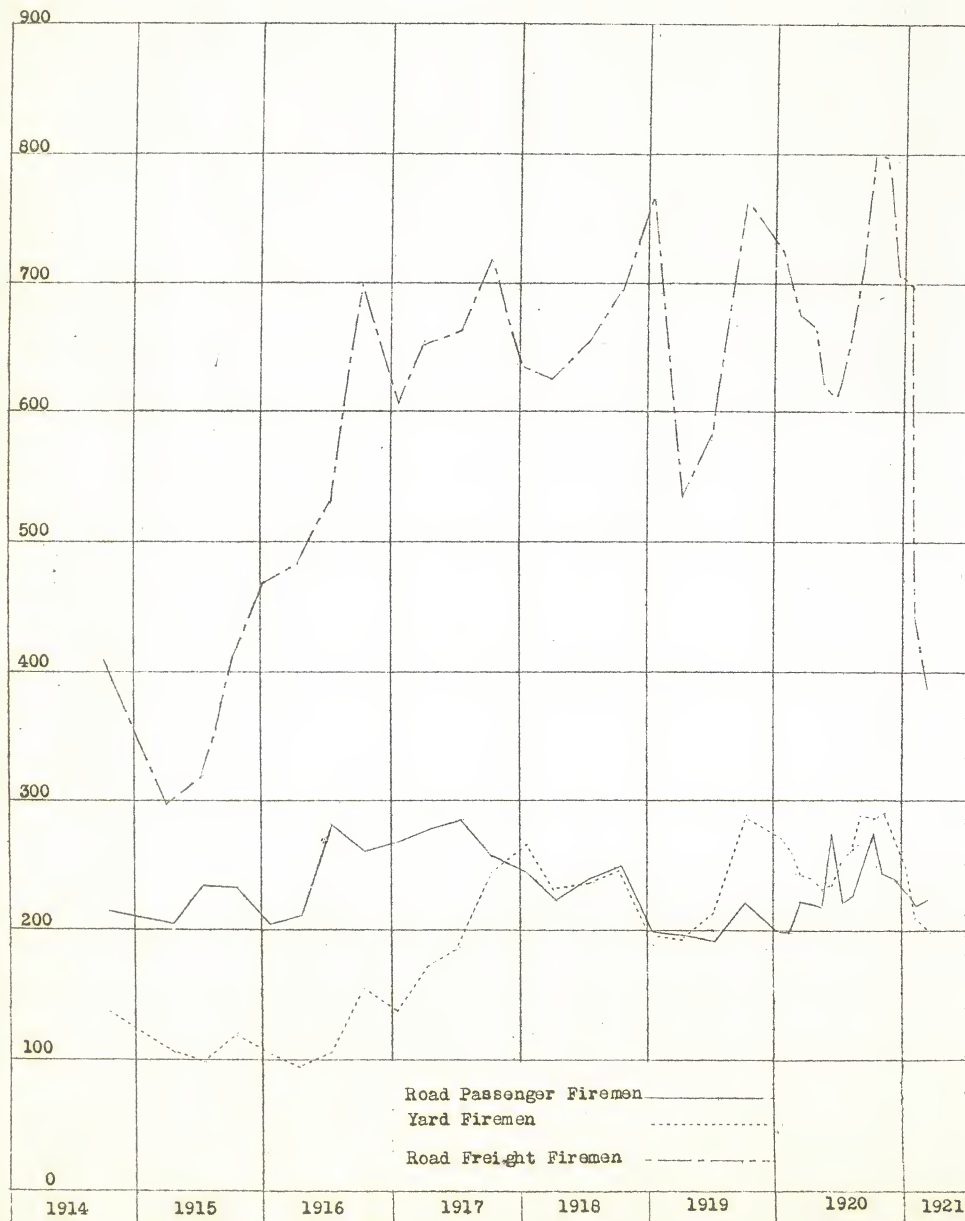
SOUTHERN PACIFIC



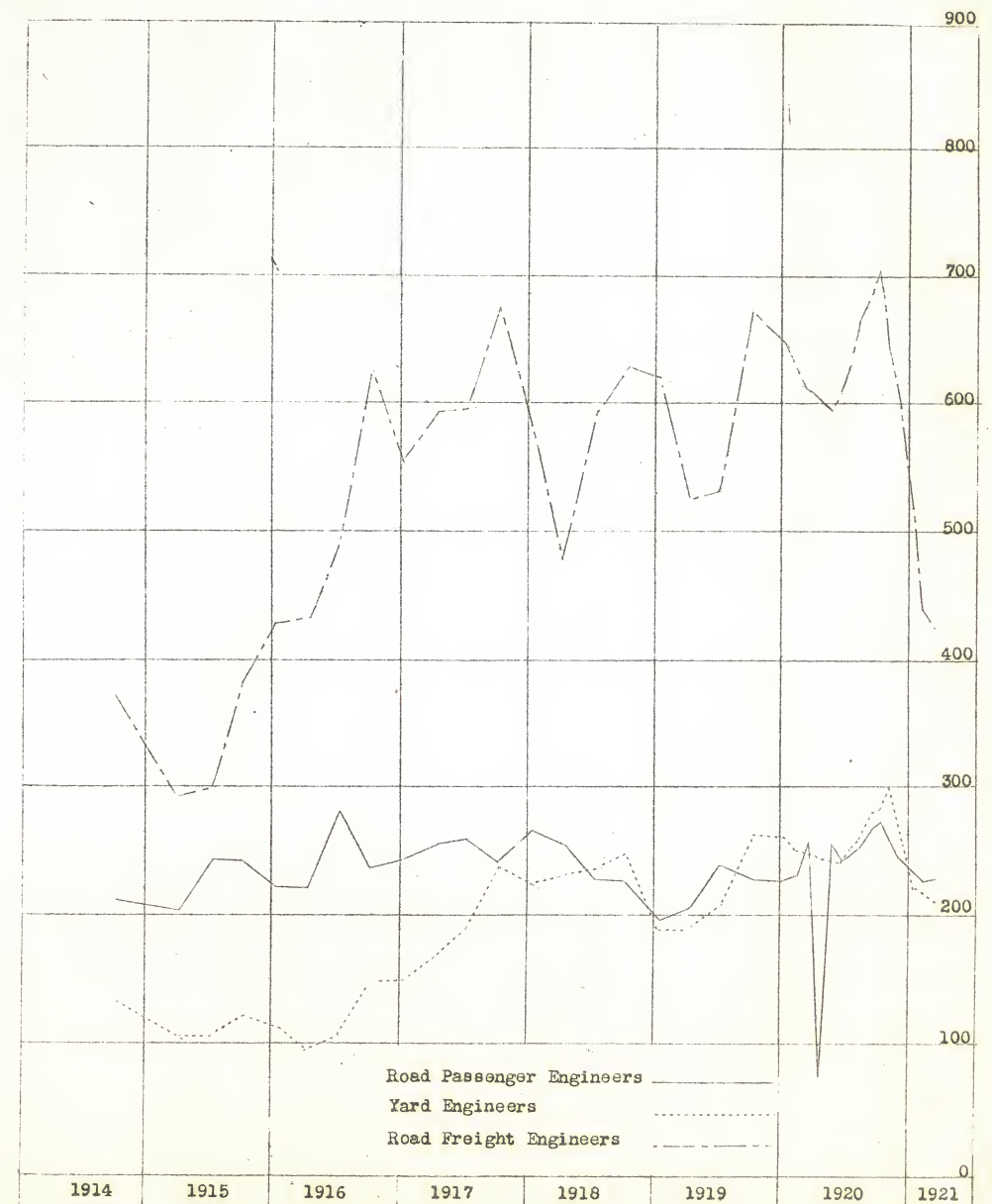
SOUTHERN PACIFIC.



UNION PACIFIC



UNION PACIFIC



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